

Razer Gets in the Laptop Game / Windows 8 Inches Closer / Is PlayBook OS 2.0 Too Late?

engadget ^{Wi-Fi} distro

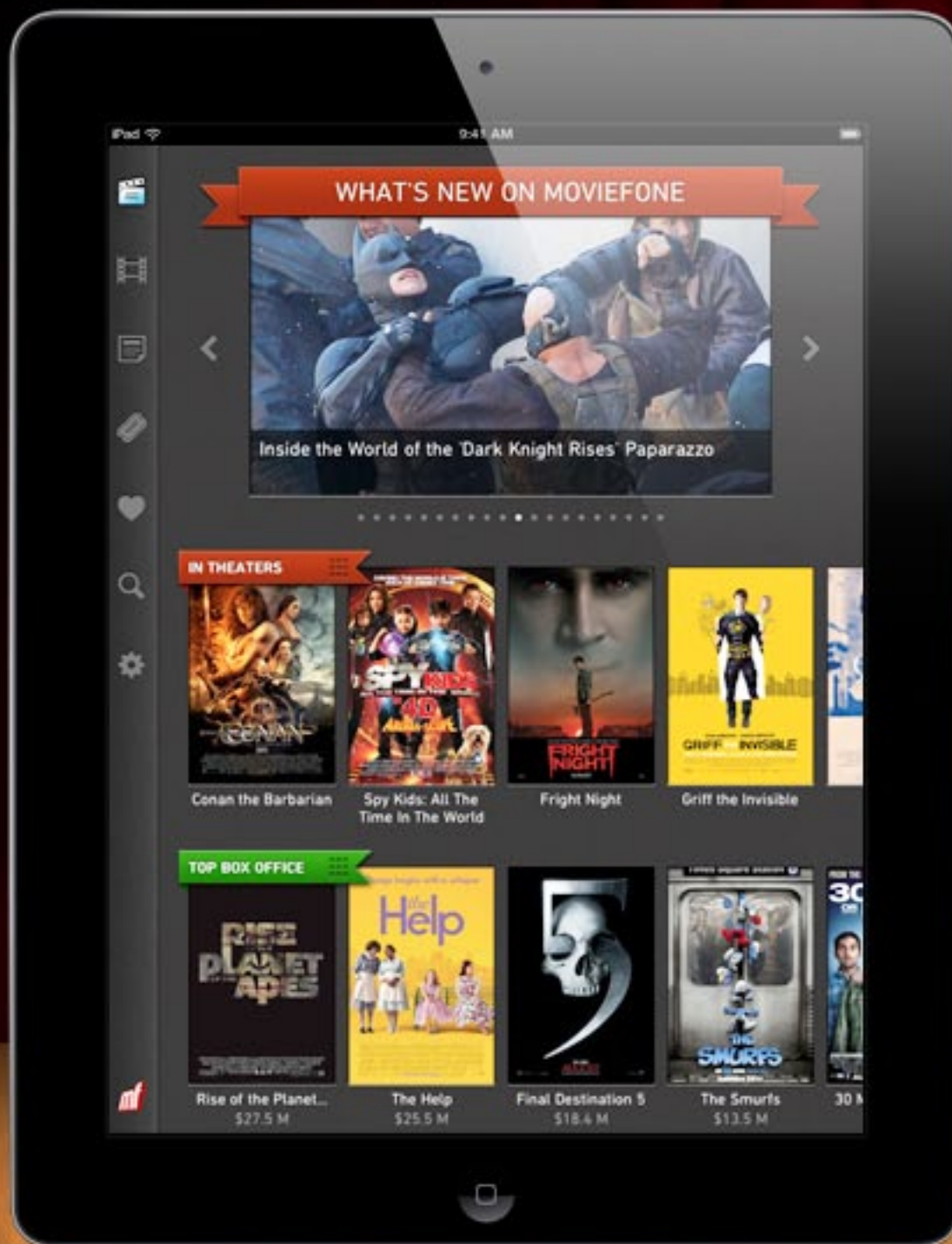
030212 #30

IT'S A MOBILE WORLD THE BEST OF MWC 2012



ADVERTISEMENT

moviefone



Now Showing On iPad

The best way to find showtimes, watch trailers, see exclusive clips and more.

Free Download 



Available on the
App Store

DISTRO Issue #30...



» *Enter*

EDITOR'S LETTER

Windows 8, MWC and Apple Makes a Date

By Tim Stevens

SNAP ANALYSIS

Apple's Touchy Feely Invitation

THE WEEKLY STAT

The OS Wars Go Global

By Donald Melanson

SWITCHED ON

Windows Media Center, Minus Windows

By Ross Rubin

RECOMMENDED READING

Download the Universe, Polaroid and More

By Donald Melanson

» *Features*

PREVIEW

Windows 8

By Tim Stevens

REVIEW

BlackBerry PlayBook OS 2.0

By Tim Stevens

FEATURE

» The Best of MWC 2012

By Engadget Staff

REVIEW

Razer Blade

By Dante Cesa

» *ESC*

IN REAL LIFE

Nikon D90, myCharge Portable Power Bank 6000 and Phosphor's World Time Sport

By Engadget Staff

Q&A

Mobile Burn's Michael Oryl

LAST WORD

Siri Easter Eggs

By Box Brown

Windows 8 Opens Up, MWC Comes to a Close and Apple Makes a Date

Editor's Letter

No, your eyes weren't deceiving you, there was a *lot* of news this week. Much of it came from abroad thanks to the Mobile World Congress event filling your RSS reader with more cellphone content than is necessarily decent, but still some of the biggest news came from the homefront courtesy of Microsoft. ¶ The Windows 8 Consumer Preview was released to the masses on Wednesday the 29th and I was given the opportunity to spend some time with it early. My full details are waiting for you later in this very issue, but I will say I was a little disappointed by this release. I've been a die-hard Windows user since the 3.1 days and am still optimistic that Windows 8 will bridge the gap between mobile and desktop operating systems without compromise on either side. With the current build, Windows 8 makes a fine tablet OS and a fine desktop OS too — but there's still a huge gap between the two experiences. Those two halves need to come together for this to feel complete.

Now on to the MWC news from Barcelona. We have a full



overview waiting for you later in the issue, so feel free to skip ahead, but of the dozens of fancy new devices shoved in our face this week a few stood out to me.

HTC had one of the strongest portfolios, launching the “One”

series of higher-end phones. Top among those is the One X, a 4.7-inch, 720p smartphone with a dual-core Snapdragon S4 processor, Ice Cream Sandwich and LTE connectivity. It's coming soon, exclusive to AT&T in the US, and looks fantastic.


LG entered the quad-core realm with its aptly titled Optimus 4X HD smartphone, which features an HD IPS display. To show off its powerful prowess, the phone not only records in 1080p, but lets you pinch-zoom *video* during playback. The company also showed off its tablet-sized Vu, a 5-inch hunk of a phone that's something like a Note competitor (it even has a stylus), but offers only a 1024 x 768 resolution on its chunky 4:3 aspect ratio display.

ASUS is taking a very different approach to bridging the tablet and smartphone divide, at long last unveiling the final revision of the Padfone it's been teasing us with


for ages now. The heart is a 4.3-inch Super AMOLED qHD smartphone with a dual-core S4 processor, but it really starts to come together when you slot it in to the optional 10.1-inch tablet dock. It snuggles in the back and suddenly you have all your stuff on a full-sized tablet — no fancy cloud-syncing required. The ICS build should ensure that it works well in either mode, but the real question here is going to be cost. ASUS hasn't said how much either handset or tablet dock will cost, but for this to be successful it must be considerably cheaper than buying a separate phone and tablet.

One last highlight from MWC comes from Samsung, which took this opportunity to refresh its Galaxy Tab lineup, launching both a new 7 and 10.1-inch model to replace those currently available. These new versions don't do anything drastically different than we've seen before, but they should start driving prices lower and will come out of the box with Ice Cream Sandwich. Samsung also released a stylus-bearing version, the Galaxy Note 10.1. No, sadly, you can't make calls on it.

Toward the end of last week, developer Steven Troughton-Smith was doing some poking




I am still optimistic that Windows 8 will bridge the gap between mobile and desktop operating systems without compromise on either side.




around the Android offerings in the BlackBerry App World for the PlayBook and noticed that the version of the Dolphin HD browser wasn't actually submitted to the store by the developers who made it. Instead, it was offered by Handster. We contacted the Dolphin developers and not only did they not consent to having their browser pushed to the App World, they didn't even know it was available there! Handster responded stating that its standard distri-

bution agreement for partners allows for them to submit apps on their behalf. The company is now working with the Dolphin devs to "clarify the issue."

Finally, we'll wrap this week in review by looking forward to next week, or one day in particular: Wednesday. Apple has invited us out to San Francisco for the launch of its next iPad. Mind you, the company didn't say it's launching a new iPad, but the invite showed a picture of a finger touching a tablet and this message: "We have something you really have to see. And touch." So, new iPad next week, then. Get excited!

For now, we'll be diving deep into Windows 8 and Mobile World Congress in this week's Distro. We also have my impressions of BlackBerry PlayBook OS 2.0, a review of the Razer Blade gaming laptop, Ross Rubin talks about taking the Windows out of Media Center and Mobile Burn's Michael Oryl takes a moment to bless us with a Q&A session. Phones, tablets, laptops and software — we've covered the bases so get comfortable and get informed. 



TIM STEVENS
EDITOR-IN-CHIEF,
ENGADGET

I'm pretty sure it's going to have an apple logo on the back, carry some sort of iPad moniker.

@adomanico01, via Twitter

You can expect all you want, but another tablet just like ipad2 - maybe a lil thinner, lighter and with siri is all you gonna get.

Nakul Bende, via Facebook

I imagine that it will carry a premium price without quad-core cpu, Flash compatibility or a fully customizable OS.

@techdissected, via Twitter

WHAT CAN WE REALLY EXPECT FROM APPLE'S MARCH 7th ANNOUNCEMENT?

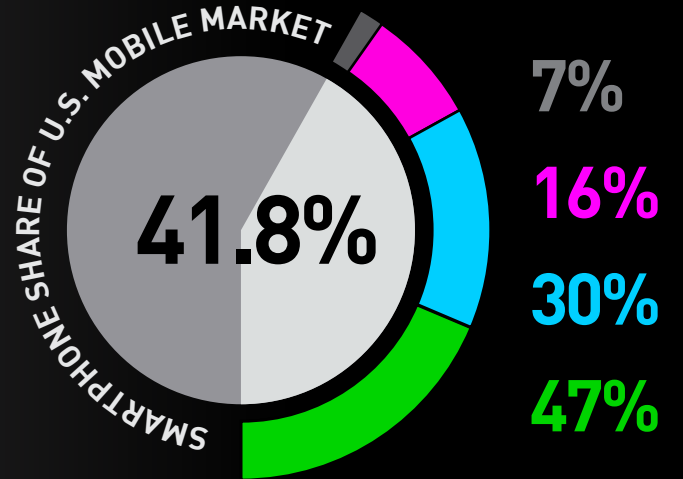
Isn't it quite obvious? A5+ dual core, PowerVR SGX543MP4, Retina Display, 8MP camera (4S), Siri, possibly a keyboard dock.

@parkelund, via Twitter

The rumor cycle is a fast and dirty one, and perhaps no device manufacturer is more susceptible to speculation than Apple. The iPad 3 has, of course, been no exception. Just this week, Apple sent out an invitation for a press event on March 7th, saying it has "something you really have to see. And touch." So will it be an iPad 3 or a refresh akin to the iPhone 4S?

Well, friends and enemies are waiting for the new #ipad3

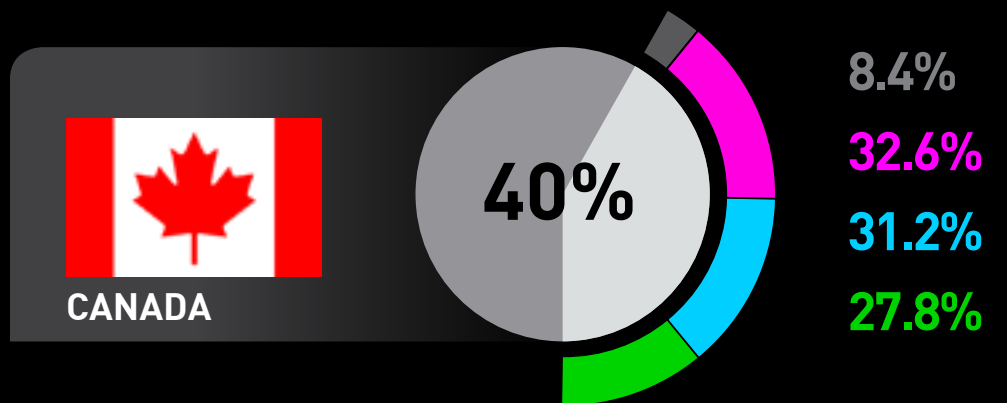
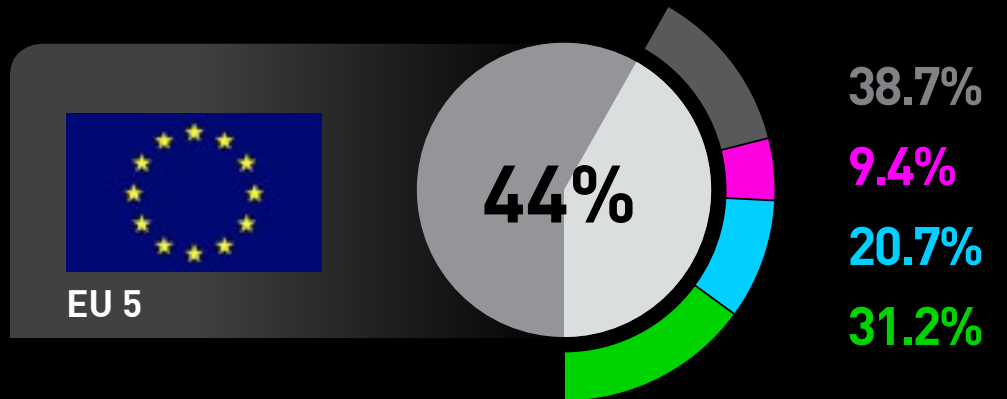
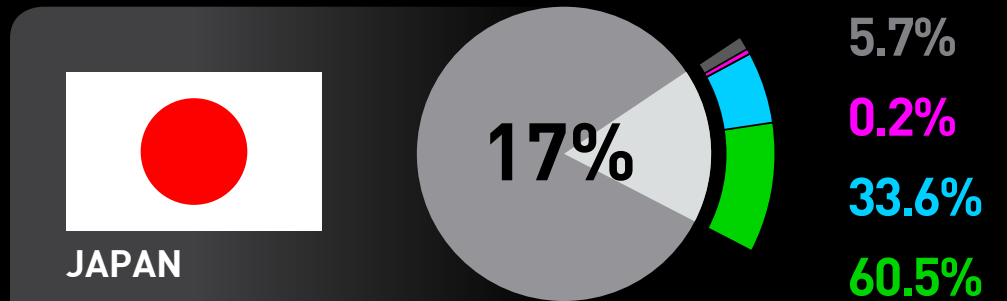
@andjur, via Twitter



ANDROID / IOS / RIM / OTHER

The OS Wars Go Global

Not surprisingly, 2011 was marked by the continued growth of the smartphone, with the adoption rate among US mobile users jumping from 27 percent in 2010 to just under 42 percent in 2011. Among those, Android proved to be the most popular platform with a 47.3 percent market share, followed by iOS at 30 percent and RIM at 16 percent (exactly half of what it was in 2010, with the majority of that lost share moving to Android). Android also took the biggest piece of the pie in Japan and the EU5, pulling in 60.5 percent and 31.2 percent, respectively. Incidentally, Canada was the sole country where RIM retained a lead, but just barely; it accounts for 32.6 percent of the smartphone market in the country— *Donald Melanson*



Based on three month average, ending Dec. 2011 from comScore's MobiLens

The Weekly Stat

WINDOWS MEDIA CENTER, MINUS WINDOWS

Switched On



BY ROSS RUBIN

Ross Rubin (@rossrubin) is executive director and principal analyst of the NPD Connected Intelligence service at The NPD Group. Views expressed in Switched On are his own.

A few weeks ago, Switched On discussed three of four new DVRs (TiVo also announced a retail version of its Premiere DVR) introduced at CES. The DVR explosion comes about a decade since the last full-featured device of this kind — the Moxi Media Center — was announced. The DVR market is a challenging one for many reasons; not least of which is the development time required to get a software interface just right. ¶ However, there has been a high-quality DVR experience that has been lurking under the desktop of many Windows PCs, also for about a decade. Windows Media Center. Media Center has always had great features, but has been stymied for a number of reasons, including its reliance on having either a PC, Xbox 360, or rare Media Center Extender in the living room. Among its few active supporters has been Ceton, which has won many fans among Media Center users for creating PCI and USB devices that enable PCs to use CableCARD tuners. Now, though, it is taking its involvement in

Media Center to a whole new level. Not only is the company planning to resurrect the third-party Media Center extender by creating its own (code-named Echo) but it's planning to free Windows Media Center from its PC prison by creating a standalone DVR that uses a version of the software running on Windows Embedded. ¶ The device, code-named

“Q,” is a one-stop video entertainment shop that includes a Blu-ray disc player, 2TB hard drive, support for up to six tuners and many other enthusiast features such as switchable Ethernet and MoCA interfaces, LEDs that light up when specific tuners are being recorded and front-panel lighting that responds to a proximity sensor. The Q is compatible with the rest of the Media Center

Media Center has been stymied for a number of reasons...

milieu. For example, an Xbox 360 can act as a Media Center Extender as can legacy second-generation Media Center Extenders from Linksys or HP if you can find them.

But Ceton has also taken Q in its own direction. Since Q is a living room AV component, there is no desktop and thus nothing from which Media Center needs to be launched. Hence, there is no “green button” that inspired the name for a Windows Media Center community site that Microsoft eventually purchased. In fact, there is no Microsoft or Windows branding at all and Ceton is not shying from customizing the Media Center interface and features to its liking. For example, Ceton has designs on customizable themes that will be displayed on Echo Media Center Extenders.

And the company’s software development isn’t ending on the TV. Ceton plans to create a series of apps for Windows Phones, iPhones and Android phones that will provide full control of the Q and has shown off a Windows 8 Metro user interface that would provide streaming movies. Ceton has not yet committed to a way of transferring

broadcast flag-free shows from the Q to other PCs, but says it’s functionality it would like to see.


As the recent demise of the once-promising Moxi Media Center shows, the retail market for DVRs is challenging. A Q that sells modestly would expose Ceton to a broader customer base, but moving much beyond that will depend to some extent on how much has changed since the release of Moxi. On one hand, the basic proposition is similar: a multi-tuner DVR box promising no monthly fee. However, home networks are now a lot faster than they were when the Moxi Media Center was released and, while Ceton won’t divulge pricing for the Q, they assure it will be less than the \$800 Digeo (which bought the DVR from Moxi Digital, the startup that created it) initially charged. Securing better distribution for the very limited options that it offers for its InfiniTV PC tuners today would also help Ceton. But once you know where to find it, the strongest retail alternative to TiVo to appear in years could soon give Windows Media Center a new lease on life in the living room. 



Photo by: NASA

Download the Universe



Edited by Carl Zimmer et al

Launched at the end of January, *Download the Universe* is a book review site that's not quite like any other.

For starters, it's focused exclusively on science-minded ebooks and the occasional science-related app, and secondly it's comprised of one of the most impressive groups of science writers you could hope to assemble. That includes contributions already from the likes of Pulitzer Prize-winning writer Deborah Blum, *Ars Technica*'s John Timmer, *iog*'s Analee Newitz, *Boing Boing*'s Maggie Koerth-Baker, and site founder Carl Zimmer, with more promised from a host of other equally-talented individuals who not only know science, but know how to make it accessible.

AROUND THE WEB

Innovation and the Bell Labs Miracle



by Jon Gertner
The New York Times

A look at the "hive of invention" that was Bell Labs for much of the 20th century, where many of the technologies we use today were invented — from Jon Gertner, who's also the author of an upcoming book on the subject.

How the Polaroid Stormed the Photographic World



by Owen Edwards
Smithsonian

A brief history of the Polaroid SX-70, the camera designed by Edwin Land and described by *American Photographer*'s Sean Callahan as "the most sophisticated and innovative consumer product of its time."

Research, No Motion: How the BlackBerry CEOs Lost an Empire



by Jesse Hicks
The Verge

Far from the first or last piece to be written about the rise and fall of RIM, but Jesse Hicks has provided a particularly exhaustive overview of how the company arrived at its current state, and the challenges it now faces.

Kenya's Startup Boom



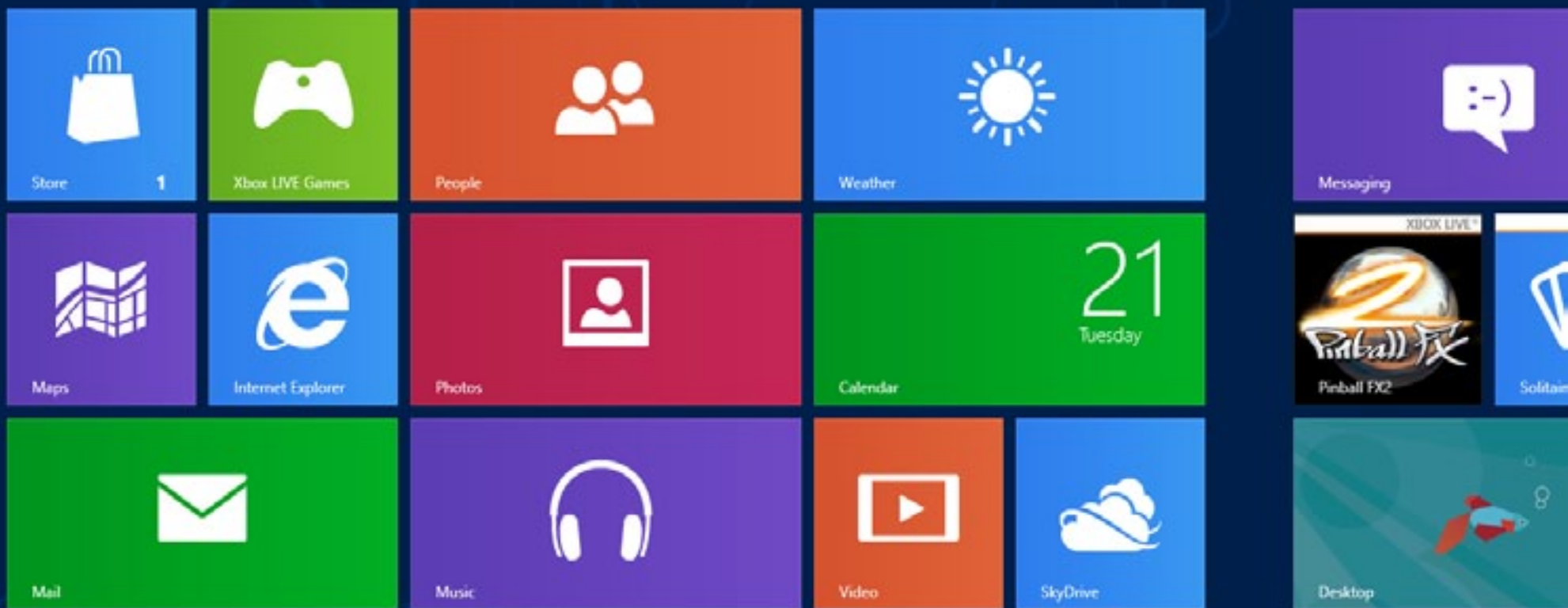
by David Talbot
Technology Review

David Talbot traveled to Kenya to get a first-hand look at the country's startup scene, and found a number of entrepreneurs using cellphones and other technologies to help improve health care. (Bonus photo essay included.)

Recommended Reading

Start

TIMOTHY J STEVENS 

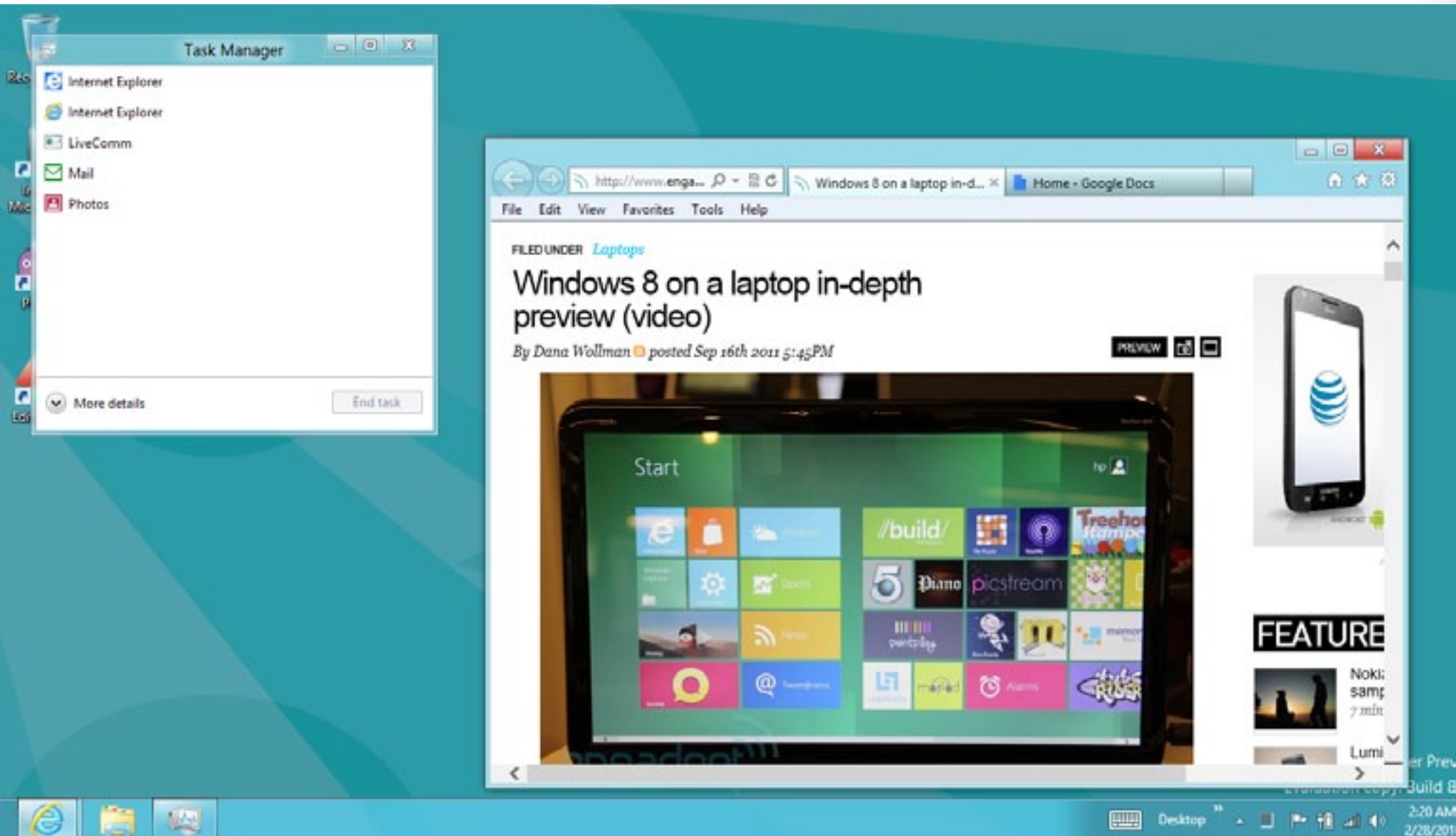


Microsoft Windows 8 Consumer Preview

BY TIM STEVENS

The early days of Windows were inauspicious ones. Sitting on top of DOS, it was hardly a revolution in personal computing — instead it felt like a disjointed platform perched uncomfortably atop a command prompt, ready to come crashing down at any moment. That's what it was, and often that's what it did. The early days of Windows required constant jumps from GUI to shell as users ran a wide assortment of apps, only some of which played nice inside a window.

It was over a decade later, after Windows 95, that the operating system would truly ditch its DOS underpinnings and feel like a totally integrated system. Why are we reminiscing? Because we're reaching that same point again. With the Windows 8 Consumer Preview, Microsoft is showing off the most complete version of the com-



pany's most modern operating system, yet in many ways it feels like 1985 all over again — like there are two separate systems here struggling to co-exist. How well do they get along? Read on to find out.

The Setup

Since you'll surely be wondering, let's run down exactly what we're working with here. This is the Windows 8 Consumer Preview, build 8250 — for the moment, the latest and greatest version of the latest and (arguably) greatest version of Windows yet.

The hardware isn't so important here, but just the same our build is running on a Samsung developer tablet outfit-

ted with a 1.6GHz Intel Core-i5 processor and 4GB of RAM. Yes, this is an x86 tablet running the non-ARM version of Windows, so it has full backwards compatibility with all the legacy apps Windows users have come to know and love over the years.

We alternated between using the tablet handheld, relying on its 1366 x 768 capacitive touchscreen, and sitting in its dock, where we instead turned on a Bluetooth keyboard and a wireless mouse. So, we had a good mix of general tablet use as well as a more desktop-like experience, and our impressions here will cover both. Also, we'll refrain from giving detailed performance figures, as it's still far too early for that — though

we will say we were quite impressed by the boot time (10 seconds, cold) and the overall responsiveness of things.

The Basics

If you're completely unfamiliar with Windows 8, you might want to take a moment to engross yourself into our deliciously comprehensive look at the Developers Preview on a laptop, or our impressions of the same on a tablet (see issue 4). To get you up to speed quickly, Windows 8 marks the biggest change to the OS since the aforementioned 95 flavor (which, shockingly, turns 17 this year). There are a huge number of changes, and these are just a few of the highlights.

With Windows 8 comes the introduction of a Metro-style interface, inspired by the lovely and intuitive presentation found in Windows Phone. In it, apps and functions are pinned to tiles and, to interact with those apps, you simply tap those tiles. The former Start Menu has been replaced by a full-screen view of tiles that you can scroll through horizontally. You can pin applications, shortcuts, documents, webpages and any number of other things, customizing the interface in any way you like — so long as what you like is rectangular and only extends from left to right. (Perhaps Windows 9 will take a hint from GridOS and extend vertically as well.)

Additionally, Metro-specific apps can now be written that have a strong focus on full-screen execution, but can also be tacked on to either the left or

right of the display, where they'll take up roughly one quarter of the available pixel real estate. They can't however, run in a traditional, resizable window. This greatly simplifies development of these apps, but it also puts a bit of a governor on GUI multi-tasking — power users here will be Alt + tabbing far more than ever once Metro apps start taking over the Store.



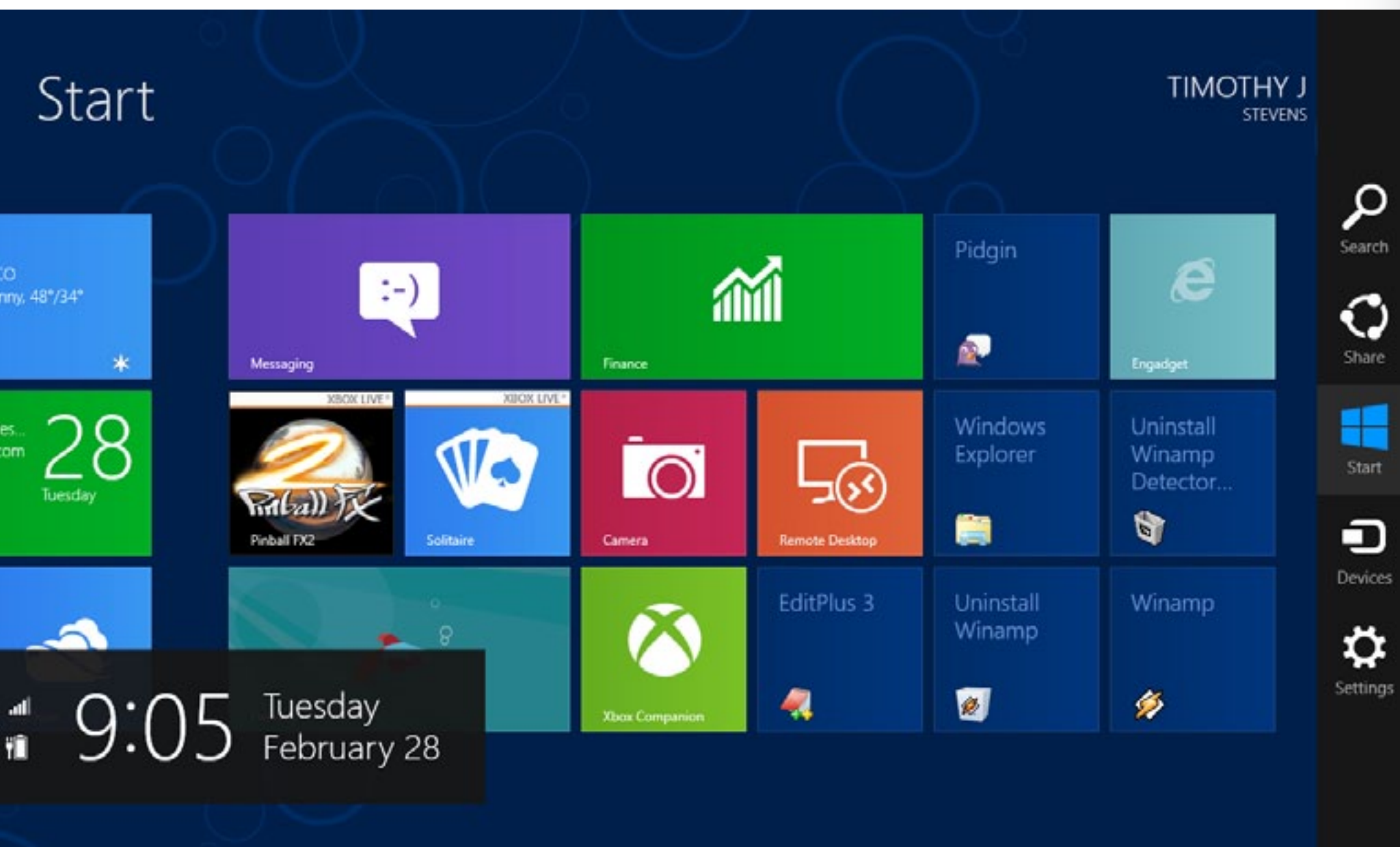
Power users in Windows 8 will be Alt + tabbing far more than ever once Metro apps start taking over the store.



Thankfully, Microsoft has introduced a series of gestures and keyboard shortcuts to help alleviate some of that frustration and give those more intense users the means they'll need to stay in control. Let's take a look at some of them.

The Gestures

There are a whole suite of special swipes and taps at your disposal, trying to make up for a general lack of visual indicators. With earlier versions



of Windows, everything that needed clicking or attention was usually easy to pick out — buttons were raised, window edges were highlighted, you get the picture. With Windows 8 a lot of that goes out the window and you're left having to know your way around a bit better. The gestures help to make up for that, though you'll need to learn them. And, yes, each one has a mousy equivalent for those averse to smudges. Here are a few highlights.

Right Bezel: Charms

Hidden off the right of the screen is a set of so-called charms, which give quick access to a high-level set of system com-

mands. From the top they are:

Search - Opens up the searching interface.

Share - Brings up a list of applications capable of sharing whatever this app is offering.

Start - Takes you back to the Start interface. This is conveniently located right in the middle, where your thumb would presumably be.

Devices - Gives you a list of all connected devices.

Settings - Brings up a high-level list of settings. This is nowhere near as comprehensive as what you can get through the Control Panel, but it is much easier to get to and to parse.



To load up the list of charms, just swipe a finger in from the right bezel. With the mouse, throw the cursor in the upper or lower-right corner.

Bottom and Top Bezels: Commands

Hiding just off the top and bottom are app-specific commands. For example, the URL bar in the Metro-flavored Internet Explorer sits off the bottom of the screen and the list of tabs is off the top. Drag a finger in from either side to make them appear, or right-click with the mouse.

Left Bezel: Multitasking

This is the place you'll be reaching for

quite often if you're a heavy multitasker. Drag in from the left and your last used app will appear in a small window. Drag it all the way over and it pops to take up the full screen. Drag it only part of the way, though, and it docks onto the left quarter of the display. (You can also drag it over and have it take up the right side of the screen.) Drag out and back and you'll get a list of your most recent apps, and you can select any of them with a tap.

With the mouse it's a little different, but start in the upper-left and you'll see the most recent app. Drag down from there and the list of other apps appears. From here you can just click the one you want, or drag it around if you'd rather.

Start Button

Okay, so pressing a hardware button isn't exactly a gesture, but if you have a Windows 8 tablet it will have a physical Start button beneath the display. Pressing this brings up the full-screen Start menu. For the mouse you might be thinking the equivalent would be to just click the on-screen Start button that has resided in the lower-left since Windows 95 — but you'd be wrong. With this version of Windows, Microsoft has killed off that button, and there's no way to get it back. Instead, you need to drag down to the lower-left corner of the screen, where that button used to live, and click.

With this version of Windows, Microsoft has killed off the Start button, and there's no way to get it back.

This is probably the most befuddling change in this version of Windows. Even when you get down to the raw Windows desktop there's no graphical Start button to be found on the screen, just the hidden hot-spot waiting for your hovering cursor. You can of course use the Start key on the keyboard (officially called the "Windows logo key"), but we can imagine

some novice users on a laptop or desktop dropping down to the desktop view to run some app or another and having *absolutely no idea how to get back*.

The Keyboard Shortcuts

Don't worry, mouse-hating power users: Microsoft hasn't forgotten about you. Windows 8 features a suite of keyboard shortcuts — some familiar, others that make the Windows logo key a little more powerful than before. There are hundreds of the things, but here are a few notable highlights.

Windows + Arrow Keys - This combination, with the left and right arrow keys, moves Metro-style apps into their left or right docked positions. For Windows desktop apps, they do what they do in Windows 7 — popping over to the left or right half of the screen. Up maximizes, down minimizes.

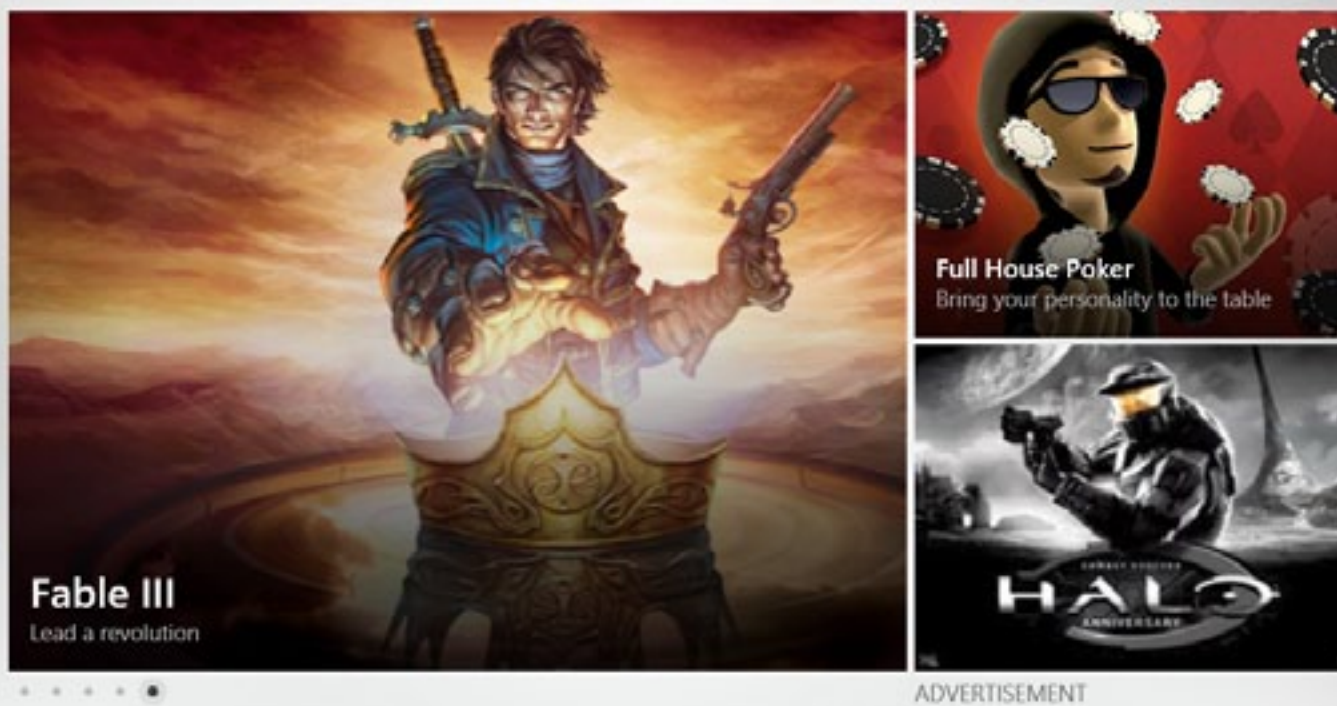
Windows + C - This brings up the charms bar. You can also replace C with I, K or H to pop straight to the Settings, Connect or Share charms.

Windows + Tab - This toggles between applications, and in this case the Windows desktop is counted as an application. This differs between the classic Alt + Tab, which still works here, tabbing between each individual window on the desktop and the Metro-style apps.

Windows + PrtScn - This captures a PNG of the current screen and saves

xbox live games app preview

spotlight



Show More

Xbox Live is one of the most prominent pins in the new Start menu.

it in your Pictures directory. As you can imagine, we used this one quite a bit.

Xbox Integration

The Xbox 360 has been an undeniable slam dunk success for Microsoft, so it's natural that we'd see it making an appearance in the company's latest OS. Indeed, Xbox Live is one of the most prominent pins in the new Start menu, and once tapped you'll be prompted to sign in to your account.

After a few moments of pondering, the machine will display all your gaming

habits in a presentation that's not too dissimilar to the one found on the console. Even your avatar will strut his (or her) smug little self across your screen, dressed as you remember them, and you can indeed make costume changes here — they'll show up back on your console momentarily.

But that's just fluff. The real interesting bit comes when you start navigating through your recently played games and accessed Xbox apps. You can launch those titles directly from your Windows 8 device and, once they're up, even con-

trol them — though there are naturally a number of restrictions.

To begin with, your controls are limited to up / down / left / right and you only have access to the four face buttons, so you can really only navigate through menus and make selections. That's just fine for cruising through the Netflix app — less so for a round of *MW3*. You also are naturally limited to launching games that are downloaded to the console or are printed on a disc that's sitting in the console's tray. Sadly, Windows 8 will not get off the couch and put in a new game for you.

The interface here is a bit clunky and sluggish; we'd definitely prefer reaching for a controller or a Harmony remote or the like, but the potential is quite intriguing. We'd love to see the Netflix integration taken a step further, for example, where you choose your movie on the tablet and it plays on the console. And we can't help dreaming of Wii U-like console / tablet harmony as well, with games played on both the slate and the screen, but perhaps that's just a bit optimistic.

The Apps

Windows 8 naturally includes a suite of apps to make it more than the foundation of an operating system. This is no different than previous versions of Windows, but these provided apps are, by and large, Metro-themed and well-integrated to the new Start menu. In other words, they help encourage that feeling of excitement about our tiled

Skydrive is effectively Microsoft's answer to iCloud, and while it's a little more manual it's also potentially more powerful.

future — or of dread if you're the sort who is going to be dragged kicking and screaming away from your desktop.

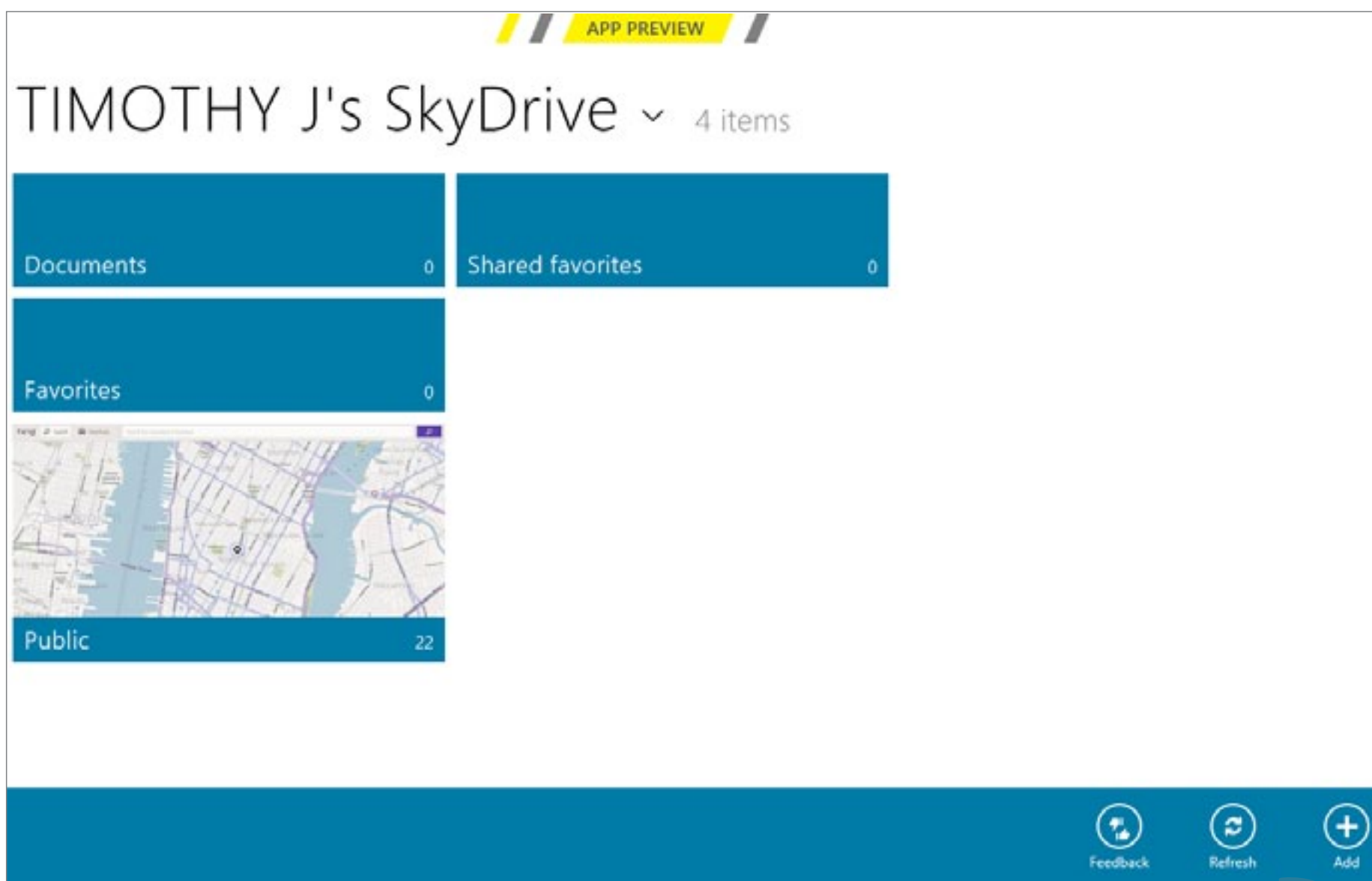
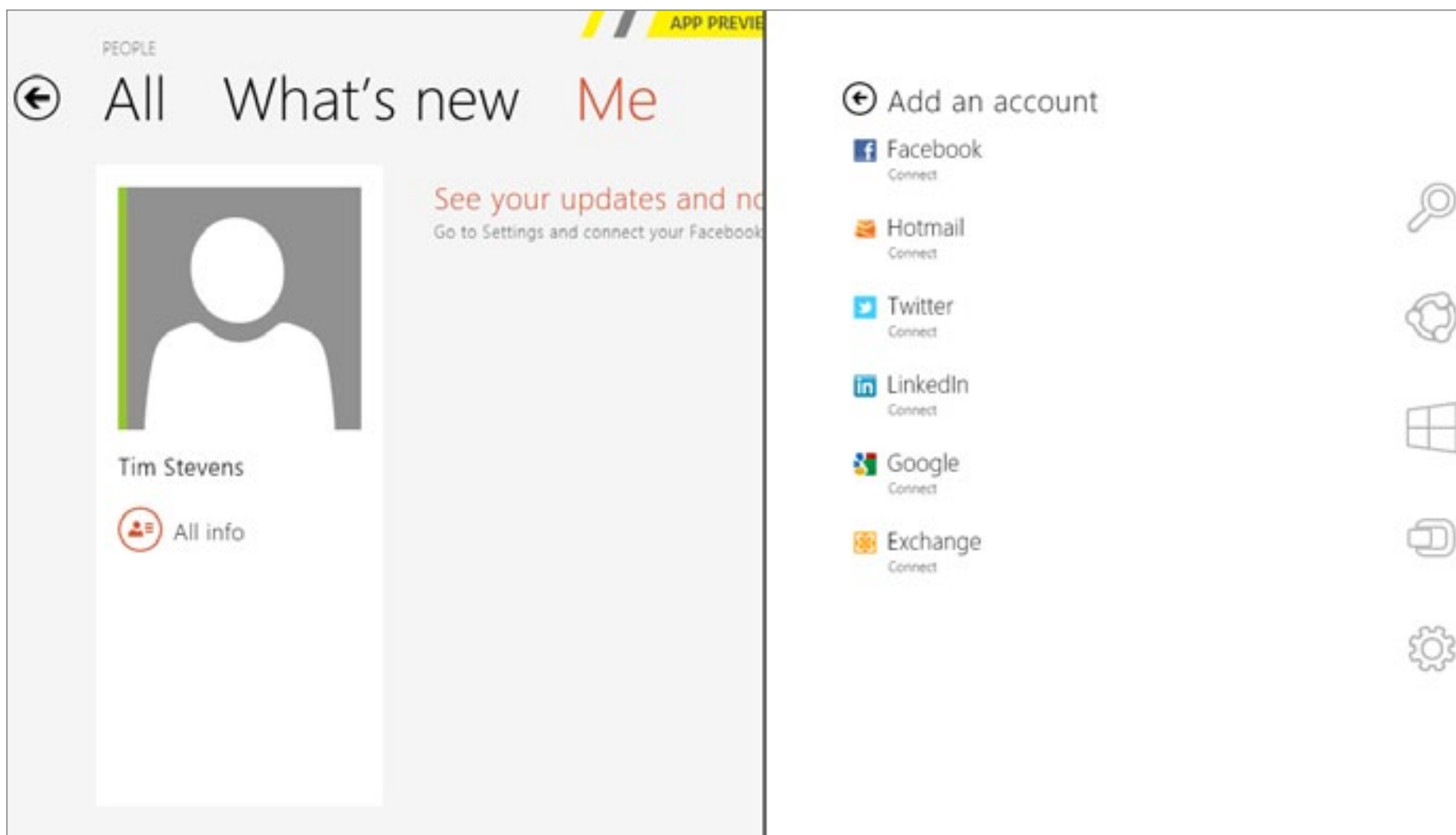
Mail, People and Messenger

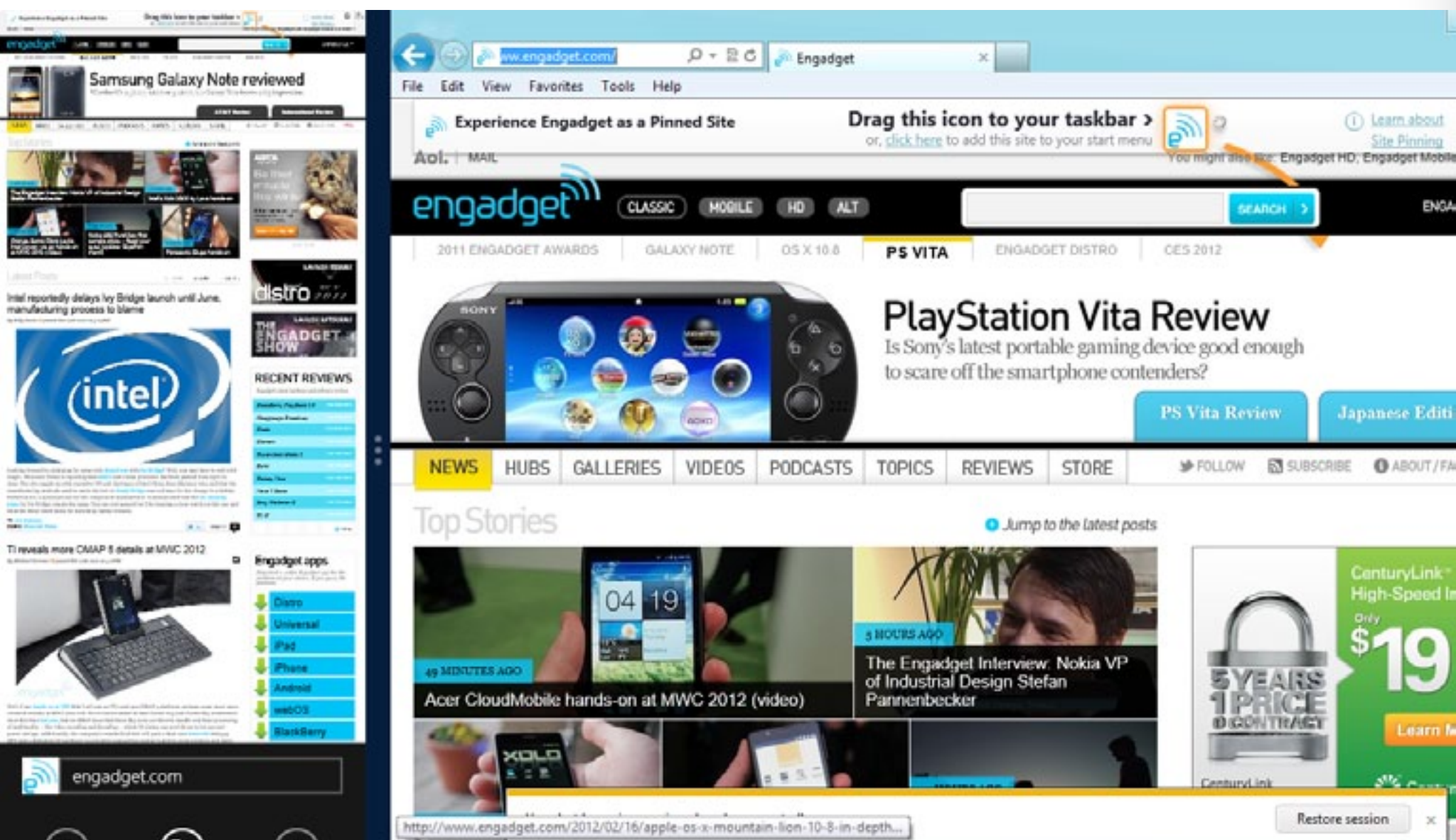
The Mail and People apps quickly tie to your chosen email and social networks, pulling in contacts and updates and letting you push your own out there. There's also the Messaging app, which connects to Microsoft's own Messenger service and Facebook as well.

SkyDrive and Sharing

SkyDrive makes uploading and downloading files from one machine to another very easy. First launched in 2007, this is effectively Microsoft's version of iCloud, and while it's a little more manual it's also potentially more powerful. You can push files of nearly any type up to your cloud account, even marking them as public for sharing. That said, you'll need to explicitly select which files are uploaded and where they go.

Microsoft is exposing SkyDrive to





developers so that future apps can tie directly in to it. In fact, in true MS fashion, the best parts of the operating system are completely open to interaction by developers. For example, there's the Share charm on the right, which enables the quick and easy sharing of content from one app to another.

You can, for example, share a photo with the Mail app, which emails it as an attachment. Share a page from IE, though, and it includes it as a link. That, of course, is just the beginning, with Microsoft exposing hooks so that third-party apps can not only share their content, but also accept the shared content of other apps. This is a stark contrast to OS X Mountain Lion, where Apple

is tightly controlling which apps will be doing the sharing — and the receiving.

Internet Explorer 10 and Internet Explorer 10

The Metro-styled Internet Explorer 10 is a huge part of the OS, where “every pixel of the page” is presented for viewing. In other words, there's no chrome, no UI at all until you swipe in from the top or bottom bezel to reveal some controls. It is, then, much like other tablet browsers.

There is, however, *another* version of Internet Explorer 10 waiting for you on the Desktop. This one looks like versions of IE of yore and is wholly disconnected from the Metro version. Bookmarks are not shared, cookies and

It feels like Windows 8 wants you to run everything maximized, and that is going to be a problem for heavy multitaskers who are used to a traditional windowed environment.

passwords are not shared, nothing is shared — sign in to Twitter on one and you'll have to do it again on the second one. Run them both and they'll show as separate entries in the new Task Manager. You have two wholly independent versions of IE 10 installed here, a situation that is endemic to this version of Windows 8 as a whole.

The Overall Experience

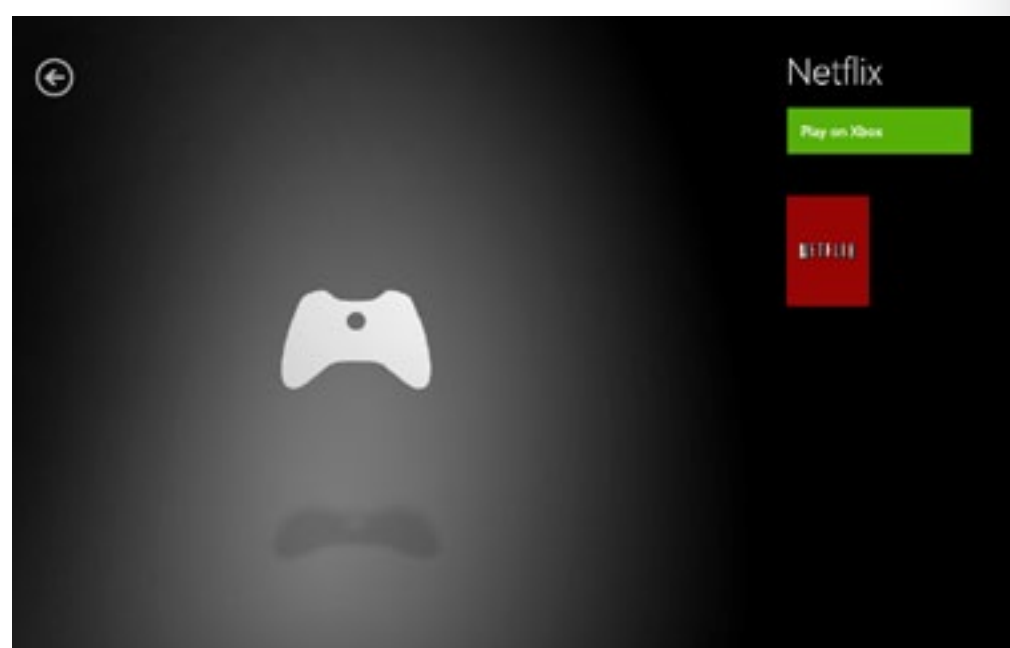
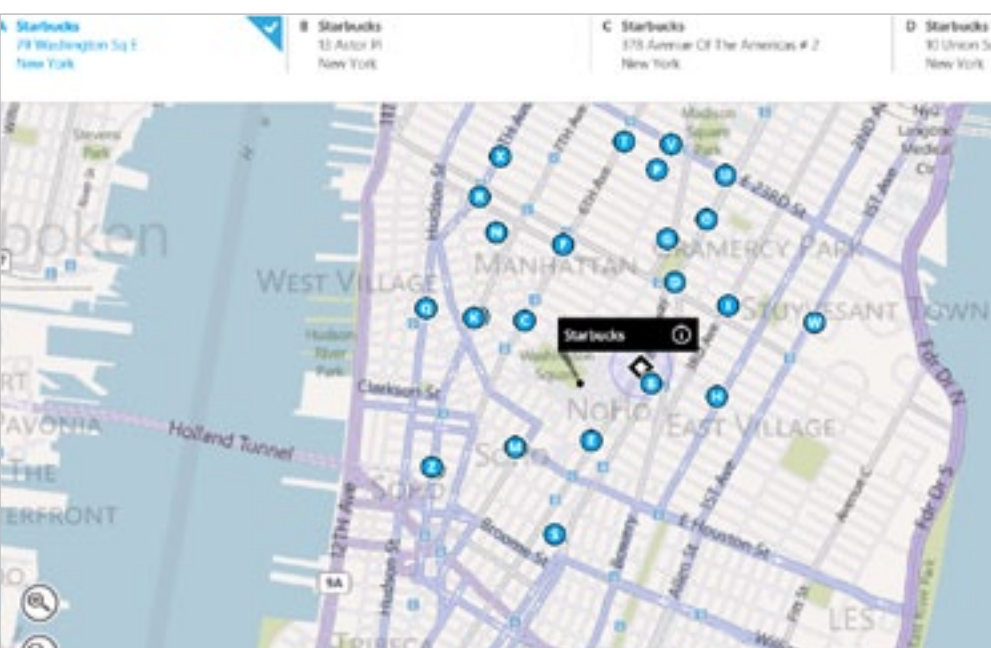
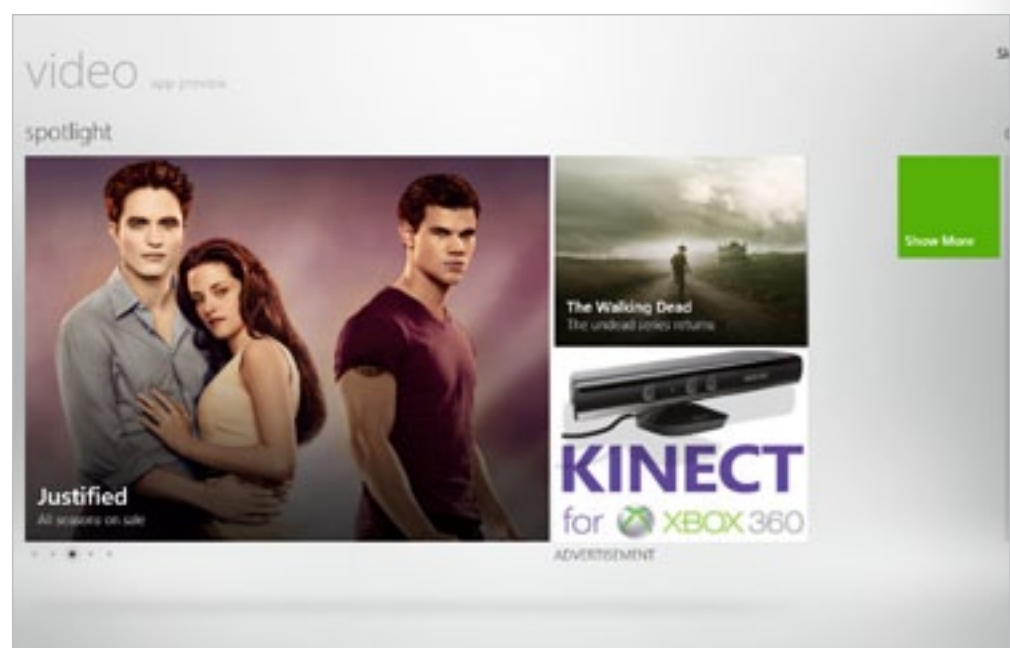
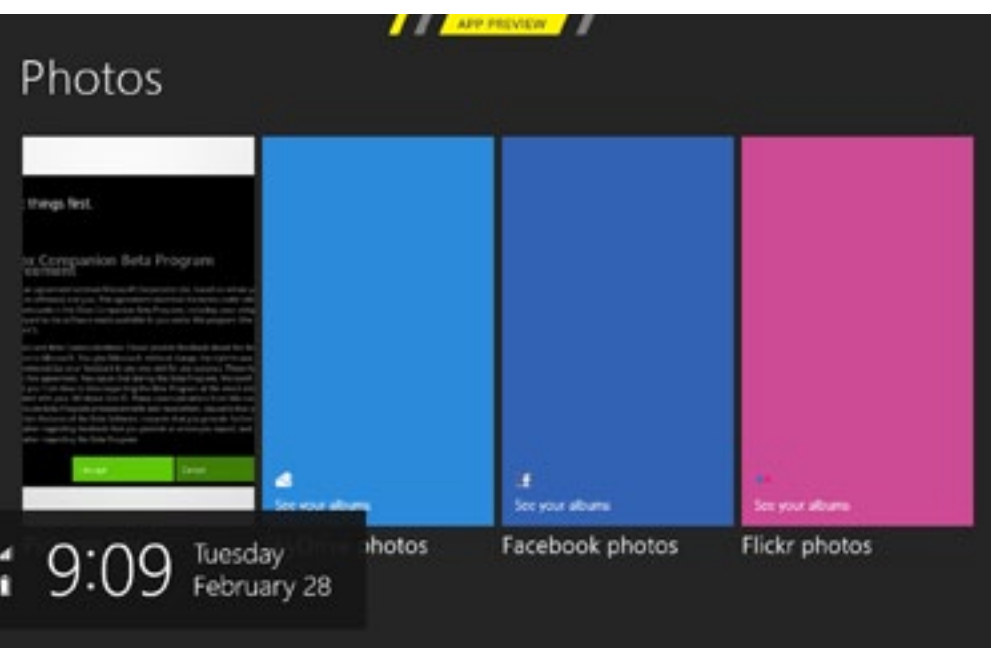
Disjointed is the key word that comes to mind after you spend some time with Windows 8. As a tablet OS, if you can keep in Metro land, things feel good. Very good. The gestures are a bit more complex and less intuitive than we've seen on other tablet operating systems, but more savvy users will appreciate that. That said, Windows is still primarily a desktop operating system, and once you get to that level the cracks in the foundation start to show.

Jumping back-and-forth between Metro and desktop is hugely disorienting and, at least in the early days of Windows 8, you'll be doing a lot of that. The simple task of switching between apps using the mouse has become painful. In Windows 7 it's just a matter of clicking in the task bar on the icon of the one

you want. Now, if it's a Metro app you want back it's a matter of going to the upper-left corner, then dragging down and trying to figure out which of the little pop-up windows is the one you want. Meanwhile, desktop-style apps are listed along the task bar on the bottom as before.

You can, of course, dock those Metro apps to the left or the right side of the screen, and multiple monitors are very much supported as you'd expect, but it feels like Windows 8 wants you to run *everything* maximized. That is going to be a problem for heavy multitaskers who are used to a traditional windowed environment. The idea is to stack and arrange windows exactly how you want them, then click quickly between them with the mouse. You simply can't do that here, and that feels like a step backwards.

Take Winamp, for example. It's an old-school app but an enormously popular one nonetheless, and something you'll often see hanging out at the top of people's screens — shrunk down so it only takes a few pixels of vertical space, but always on top of every other window so you can see what is currently playing. You can set that up here, too, but




once you hop into a Metro app Winamp — and everything else running on the desktop — disappears.

Wrap-Up

We really liked Windows 7 when it launched. It felt like a big step forward in the short time that had passed since Vista. Now, as we creep closer to a likely release near the end of this year, we can't shake a sense of doubt. Windows 8 still feels like two very different operating systems trying to be one. The potential is hugely alluring — a single OS to rule both the tablet and the desk-

top — and with each subsequent version we keep hoping *this* will be the one that ties it all together. Sadly, as of the Consumer Preview, we're still seeing a lot of loose threads.

As it stands, Windows 8 is a considerably better tablet operating system than any previous version has managed to be. However, it's still a clumsier desktop OS than Windows 7. That's a problem Microsoft must fix before release. 

Tim Stevens is Editor-in-chief at Engadget, a lifelong gamer, a wanna-be racer, and a born Vermonter.



Initializing, Please Wait...

REVIEW

BlackBerry PlayBook OS 2.0

The BlackBerry PlayBook 2.0 update adds much-needed functionality that should have been there at the beginning.

BY TIM STEVENS

Ladies and gentlemen, welcome to the world of email. Yes, email! Sure, many of you have given up on the stuff in favor of more instant means of communication, but don't worry, because that's here too! Yes, the BlackBerry PlayBook, which was released 10 months ago, is now finally able to send messages all by itself. Sure, BlackBerry Bridge is still there and more useful than ever, tying

the PlayBook even closer to your work-issued smartphone, but the 7-inch slate finally feels like it can stand a little more solidly on its own two feet.

Thankfully that's not all — this recently refreshed tablet has a few other tricks up its sleeve, most notable being the ability to run some (focus on the *some*) Android apps without having to resort to any messy tweaks or hacks.



No, the biggest point of discussion at PlayBook's launch was what it couldn't do.

The experience isn't entirely clean, nor does it quite feel like the refresh the "two dot oh" moniker implies, but it is a nice step forward. Read on through to see what you get.

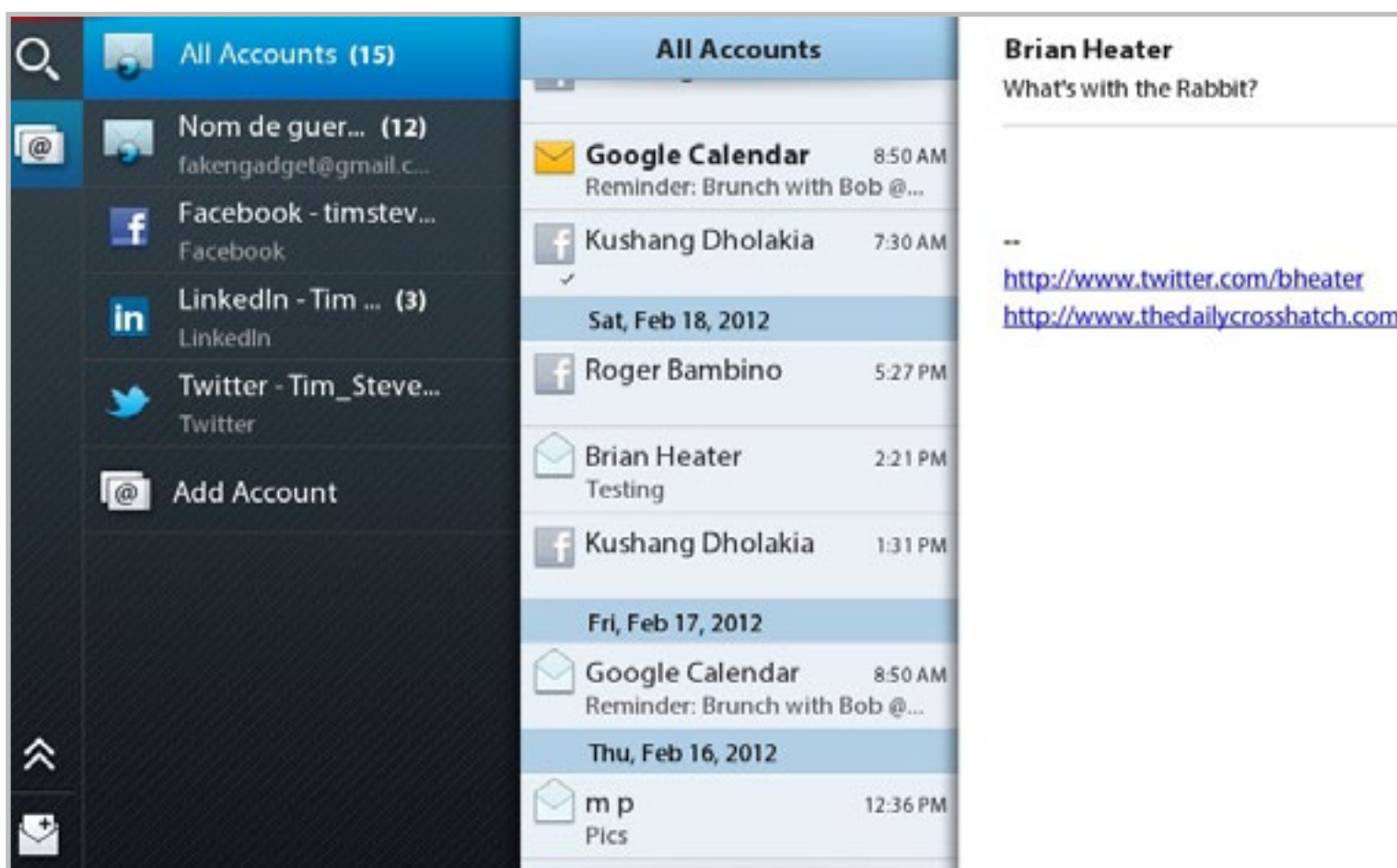
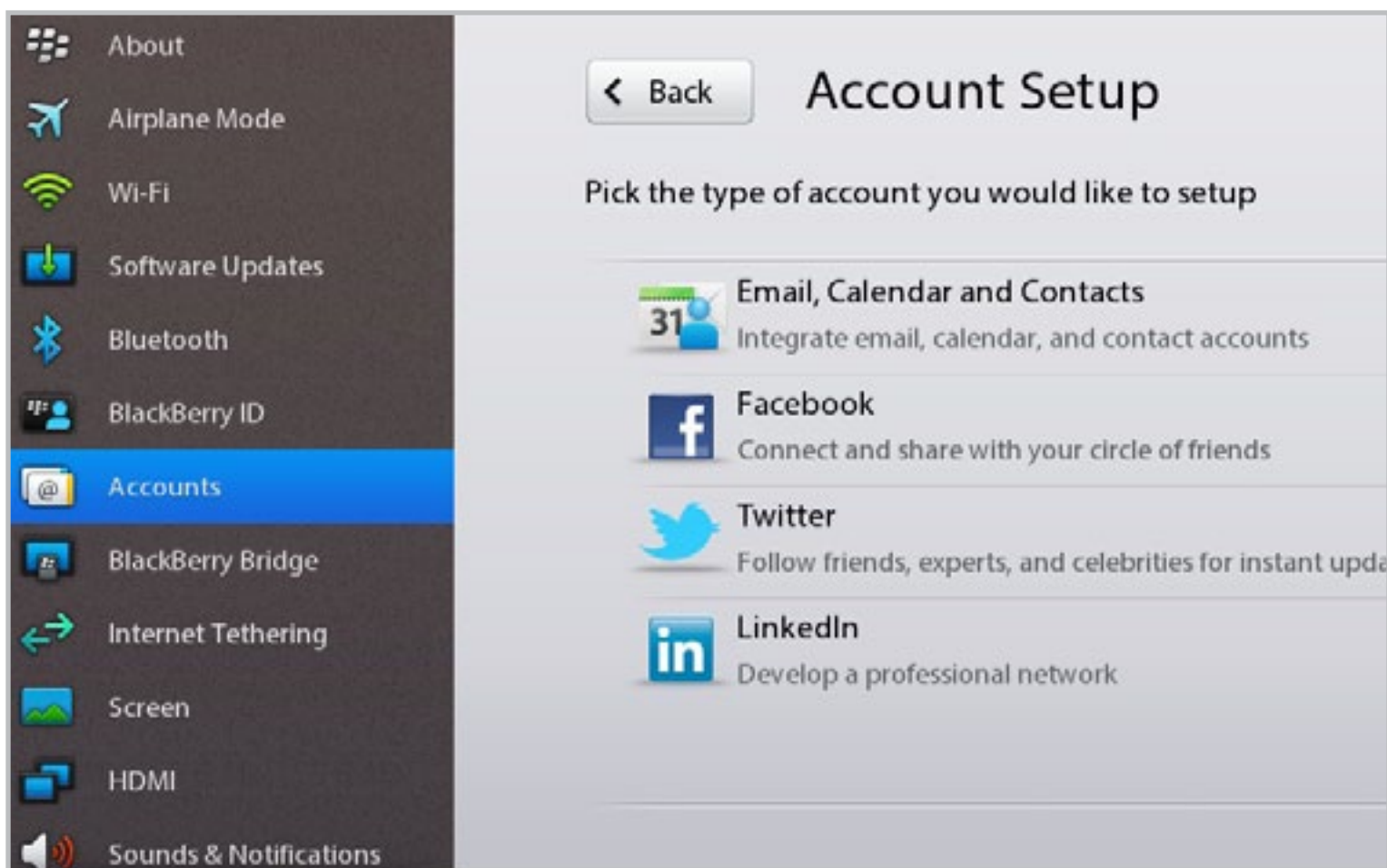
Messages

The biggest point of discussion at the launch of the PlayBook wasn't the thing's stout build quality, its stoic good looks or even its finger-friendly gestures. No, the biggest tale was what it *couldn't* do. It lacked a dedicated email app, had no concept of a calendar and couldn't even keep track of your contacts. Sure, there was a Gmail icon sitting there next to the

other apps, but that was just a link to an optimized version of the web interface. It didn't fool anybody.

As we mentioned, more and more people are forgoing email for other means of communication and those still down with POP are largely sending their missives through some online service or another. But, for a platform that made a name for itself by producing the most email-friendly smartphones on the planet, producing a tablet by the same name that's completely ignorant to the stuff was a glaring oversight.

Of course, the PlayBook *could* send emails, but only when paired with a



willing BlackBerry smartphone via the Bridge app. That 'ol Bridge is still here, which we'll discuss in just a moment, and now users are swimming in a wealth of messaging options. Both Bridge

and Messages let you send and receive emails and, should you configure the same email account in both you'll get not one but *two* notifications with every email you receive! That is every bit as

annoying as it sounds.

Thankfully Messages is much more than just email. Through it you can aggregate messaging from Twitter, Facebook and LinkedIn — the most important social network for suits — though you are limited to only one of each. (Sorry, Twitter schizos.) You can, however, have as many email accounts as you like, coming through Exchange, Hotmail, Gmail, IMAP, or POP.

Add a bunch and everything will be all jumbled together into a single view of what's going on. Every friend request, every Twitter DM and every desperate "Know of any openings?" message from that guy you used to work with that summer who quit in a huff and quickly had second thoughts. The integrated view is nice if you're a casual communicator, but if you're the social sort things quickly become overwhelming. Thankfully, with a tap in the list

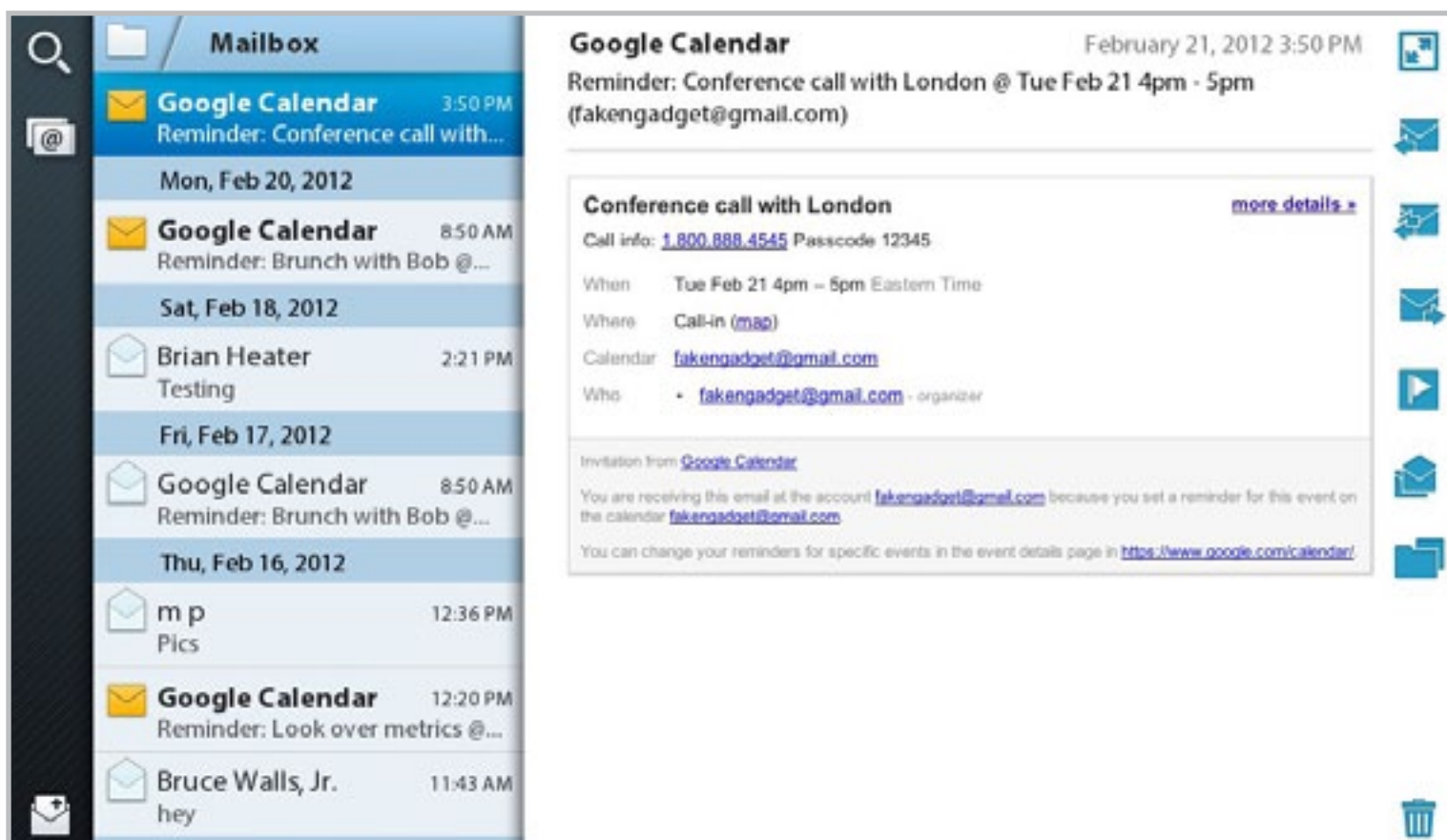
of accounts on the left you can display only content from that source, and you can also filter by folder (or label, in the case of Gmail).

While you can view other content, this is not a replacement for the various other social apps in there. For example, unlike the (generally quite good) Facebook app, in Messages you can only view messages, friend requests and events. No status updates here.

The email sending interface is clean and simple and pretty much everything you would expect. There's a box for "To," a box for "Cc," a third for "Subject" and, finally, the place where you type in the body itself. No, Bcc is not supported, but attachments thankfully are, and you can choose any file you like.

Contacts and Calendar

Yes, there are new applications to manage these things, too. We signed in with





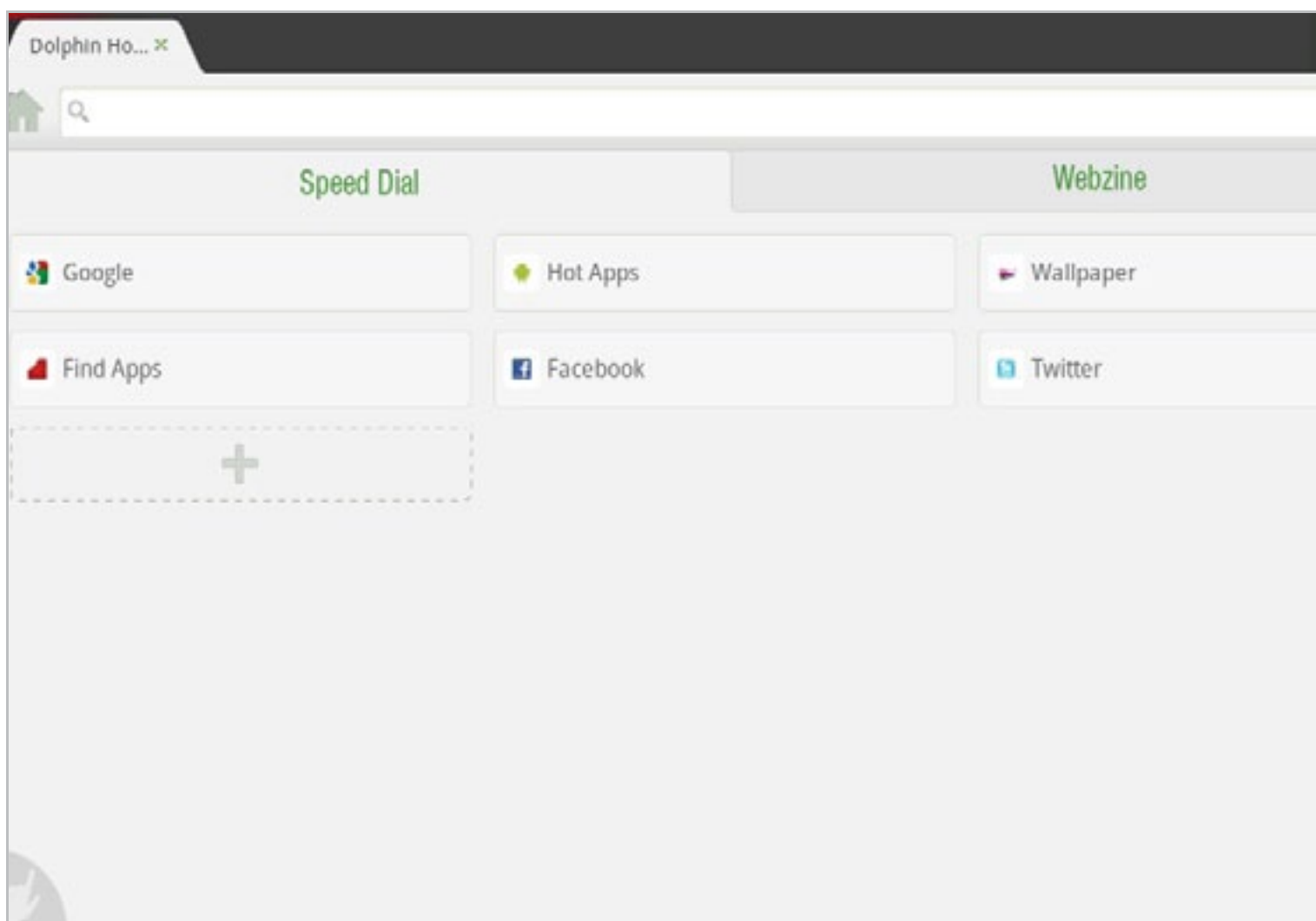
our Gmail and Facebook accounts and the tablet made quick work of our pending appointments, listing them all in a simple, straightforward calendar view. You can create new events and push them to any of those accounts, but the functionality is somewhat limited compared to the real thing. For example, you can create an event on your Google Calendar, but you can't specify anything more than a simple pop-up reminder.

The Contacts app is similarly functional, pulling down whatever your social networks want to serve up. However, it's not particularly smart. For example, we have plenty of friends in LinkedIn, Facebook and Twitter who appeared two or three separate times in the list. You can manually link them together if you're so inclined, but that sounds only marginally more entertaining than manually defragmenting your hard drive bit by bit.

Happening across an Android app in the App World is a bit like winning the lottery: you're unlikely to do either by chance.

Android

As nice as it is to finally have some proper integrated messaging, the most talked-about feature here is the ability to run Android apps right out of the box. You'll find them in the App World — well, you *might* find them. RIM didn't want to make these stand out beyond the standard apps, so happening across an official APK is a bit like winning the lottery:



you're unlikely to do either by chance.

So we specifically went looking for some clues on what to search for, and we had the most luck poking around the *CrackBerry* forums for posts by lucky winners. In this thread we found a short list of available apps and downloaded two: the Dolphin HD browser and *Pool Break Lite*.

The apps download and install quickly and smoothly enough, like any other app, and they're listed right next to any native apps with nothing untoward about their icons. Just make sure you save up a little extra patience the first time you run them. Select one and you'll be presented with a black screen telling you that the app is "initializing" and ask that you "please wait."

It's basically like rebooting the tablet,

but thankfully that's just a one-time thing. Android apps will later load more quickly and, once in memory, seem to run well. We prefer the (still excellent) stock PlayBook browser to Dolphin HD, but that's not to say the other one doesn't swim very well in these unusual waters. It does.

We wanted to try out a little game performance, and are happy to report that *Pool Break Lite* too ran well. It admittedly isn't the most polygonally demanding of all titles in the world, and the multi-touch navigation in the app was a bit jumpy, but the tablet had no problem emulating the Android calls to make it run.

Developers will be glad to know that, after submitting their apps to App World, they can charge money if they

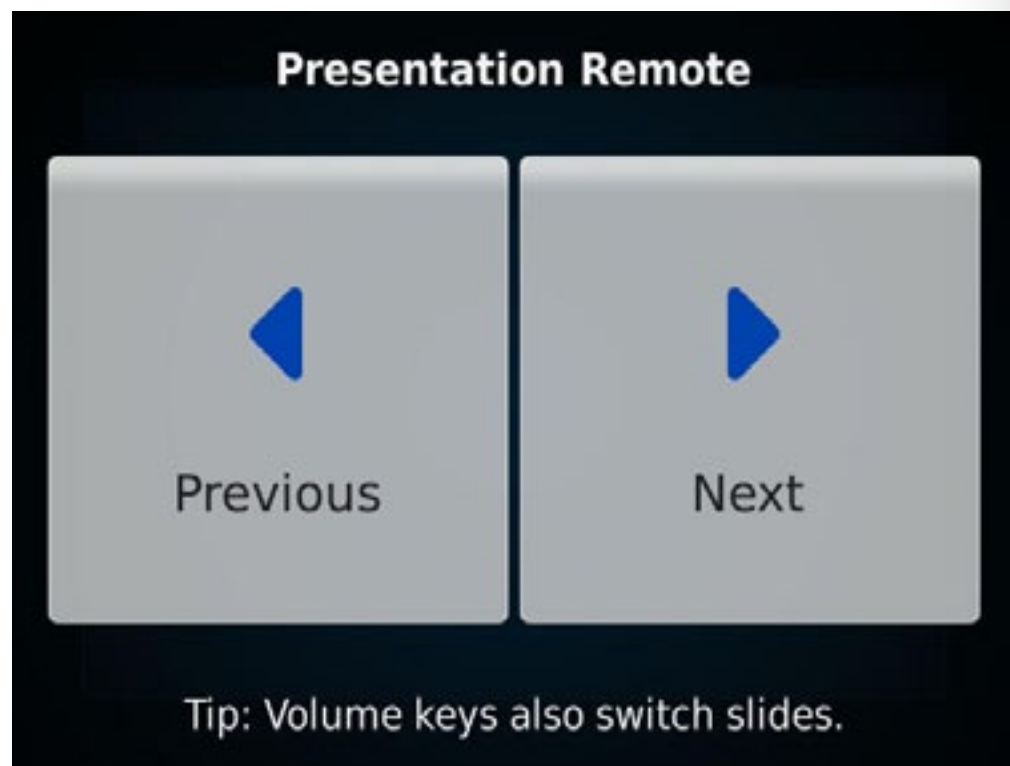
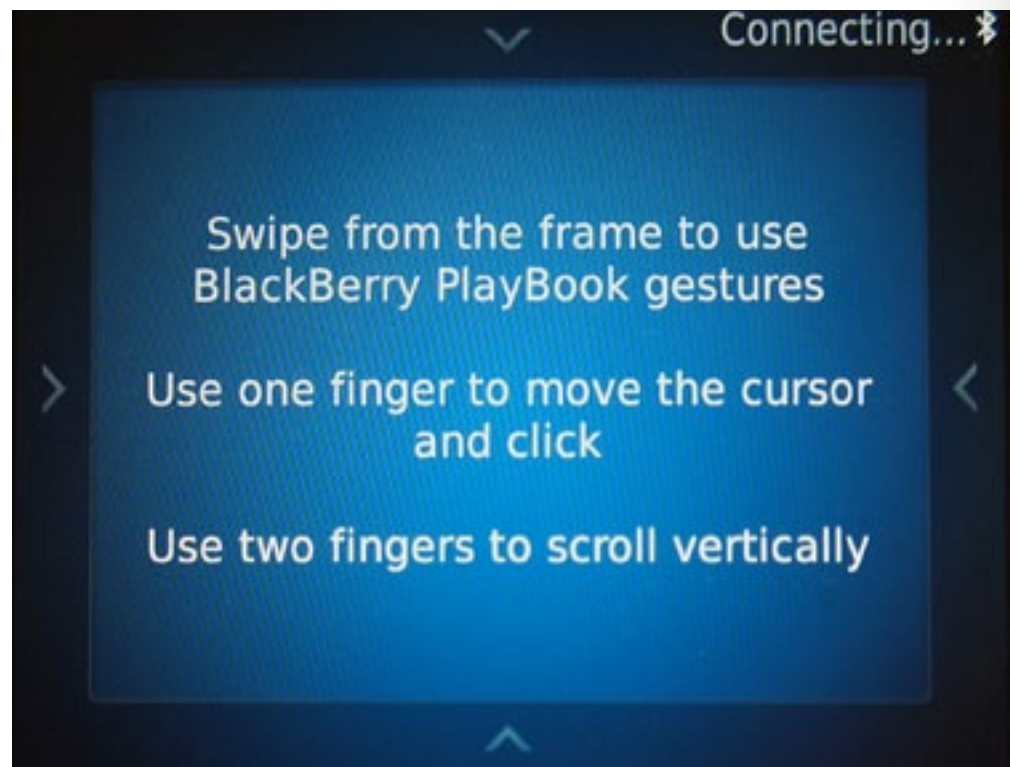
BlackBerry Remote will turn your Bold into the best HTPC remote on the planet.

wish, and indeed many already are. In-game ads are also supported, but RIM provides no Android support for its own BlackBerry ad services.

BlackBerry Remote

The biggest new feature in the 2.0 version of BlackBerry Bridge, which ties your phone to your tablet, isn't actually directly related to Bridge at all. It's Remote, which adds the ability to use it as a very smart, very expensive remote control. Pair the two and you can use the phone's display like a trackpad, moving a cursor about the tablet and performing gestures on the edges. You can also use the phone's keyboard to type or enter a Presentation Mode for easy navigation through a PowerPoint hosted on the tablet.

It's really great, but what's even more great is that this works with *any* device — any device that can talk to a Bluetooth mouse and keyboard, at least. We've seen this hooked up with PCs, Android tablets and more, so even if you don't have a PlayBook you'll be wanting to install the new Bridge app. It will turn your Bold into the best HTPC remote on the planet.



Print To Go

Docs To Go has been around since the beginning, giving simple viewing and editing for Office-like documents. New in 2.0 is Print To Go, which you're probably thinking gives the ability to print from your PlayBook. Actually it's the other way around. If you install the Print To Go client on your PC (no Mac support currently) you can print documents directly to your tablet, wire-

lessly. It shows up like a printer and anything sent through it can be easily viewed offline later. Nice and simple — if you have a PC.

BBM


This is the part where we'd like to write about how great the new BBM integration is with the PlayBook 2.0 OS but, sadly, we can't — because there still isn't a BBM app outside of BlackBerry Bridge. Yes, you can BBM on the tablet if you have a tethered smartphone, but it's time to be able to do it without.

For a long time we wondered when,

not if, BlackBerry would bring BBM to other platforms — iOS, Android, we knew people who would pay real money to use it. Now, though, it's clear that RIM doesn't even want to bring it to its *own* platforms, and so we're going to go ahead and stop wondering about when it will show up on anyone else's.

Wrap-Up

The PlayBook was clearly designed at the outset to only be used with a crutch, and that crutch is a smartphone. Using the tablet just felt a bit uncomfortable without a reassuringly blinking blue light from a nearby BlackBerry. With the 2.0 release, the PlayBook is rather more independent, less codependant, but still far from a strong figure when stacked up against the competition. This is a positive refresh that current owners will want to apply as soon as is readily possible, but it won't bring many new users to the fold.

The Messages app fills a void and the Android app support is a nice plus, but the former is simply something that should have been there at the beginning and the latter offers far too limited selection now to be a proper selling point. Both feel like too little and both have arrived far too late. Sadly, the best new feature here is not on the tablet at all — it's the BlackBerry Remote app for smartphones. 

Tim Stevens is Editor-in-chief at Engadget, a lifelong gamer, a wanna-be racer, and a born Vermonter.

BOTTOMLINE

RIM BlackBerry PlayBook OS 2.0

\$N/A

PROS

- BlackBerry Remote app is hugely useful
- Android compatability
- Finally, email

CONS

- Android app selection is very limited
- Still no native BBM
- Too little, too late

»The BlackBerry PlayBook 2.0 update adds much-needed functionality that should have been there at the beginning.

CAMERA PHONES, PROJECTOR PHONES AND QUAD-CORE RINGERS GALORE THE VERY BEST OF MOBILE WORLD CONGRESS 2012



LG Optimus 4X HD

Quad-core handsets were in abundance at MWC, and LG's Optimus 4X HD was the first to meet our mitts. Set to hit Europe in Q2, the 4.7-incher comes equipped with a lightly tweaked version of Ice Cream Sandwich, a 1.5GHz Tegra 3 quad-core chip and a True HD IPS LCD display. While it lacked the Prada Phone styling of previous LG handsets, we found it a more mature step up from previous Optimus phones. Among the highlights were pinch-to-zoom for video playback, impressive viewing angles and vibrant color, but LG's ICS interpretation ultimately left much to be desired. — *Mat Smith*



MAT SMITH'S
HANDS-ON IMPRESSIONS



Key Specs

OS	Android 4.0
CPU	1.5GHz Quad-core NVIDIA Tegra 3
Memory	1GB RAM
Storage	16GB
Display	4.7-inch HD IPS LCD (1280 x 720)
Cameras	8MP (Rear) / 1.3MP (Front)
Battery	2,150mAh





LG Optimus Vu

It looks like LG's been taking Notes. Like Samsung's Galaxy Note, the LG Optimus Vu rides the line between phone and tablet and comes equipped with a stylus. The Gingerbread handset employs a 4x3 aspect ratio and 1024x768 resolution on a 5-inch IPS LCD display. The company's promising an upgrade to Ice Cream Sandwich three months after its launch, slated for March on Korean carriers SK Telekom and LG+. It's thin — 8.5mm to be exact — and quite attractive, and while it's clearly wider than the Note, we'll have to wait to find out which of these stylus companions is the better phone.

Key Specs

OS	Android 4.0
CPU	1.4GHz Dual-core
Memory	1GB RAM
Storage	16, 32 or 64GB (On-board)
Display	10.1-inch WXGA (1280x800)
Cameras	Cameras: 3MP (Rear), 2MP (Front)
Battery	Battery: 1,300mAh



MYRIAM JOIRE'S
HANDS-ON IMPRESSIONS





HTC One X

Topping the list of HTC's new streamlined "One" Series, the One X "super-phone" sports a white polycarbonate unibody build and Gorilla Glass to protect its 4.7-inch 1280 x 720 non-pentile Super LCD 2 display. Abroad, it will feature a 1.5GHz quad-core Tegra 3 CPU (a 1.5GHz dual-core Snapdragon S4 processor will grace AT&T's LTE version), Ice Cream Sandwich skinned with HTC Sense 4.0 and an 8-megapixel rear-facing shooter capable of 1080p HD video. We were blown away by the look, feel and performance and impressed to see a scaled back version of the outfit's Sense UI. Our only beef? It lacks a physical shutter button, despite HTC's commitment to improving its shooters.

Key Specs

OS	Android 4.0
CPU	1.5GHz Quad-core NVIDIA Tegra 3 (Global Edition)
Memory	1GB RAM
Storage	32GB (Built-in)
Display	4.7-inch Super LCD 2 (1280 x 720)
Cameras	8MP (Rear) / 1.3MP (Front)
Battery	1,800mAh



BRAD MOLEN'S
HANDS-ON IMPRESSIONS



HTC One S

Representing the mid-range in HTC's "One" line-up, the One S packs a 1.5GHz dual-core Qualcomm Snapdragon S4 and runs Sense 4.0 atop ICS just like its singular siblings. It's also packing Beats audio and a slim, aluminum unibody physique, keeping sound and style in the family. Up front, the One S features a 4.3-inch qHD Super AMOLED display and in the back it sports the same 8-megapixel f/2.0 shooter as the One X. Its aluminum build felt nice and sturdy, and while its dual-core processor may not be as powerful, it's bound to be a bit cheaper.



Key Specs

OS	Android 4.0
CPU	1.5GHz Dual-core Qualcomm Snapdragon S4
Memory	1GB RAM
Storage	16GB
Display	4.3-inch qHD Super AMOLED (960 x 540)
Cameras	8MP (Rear) / VGA (Front)
Battery	1,605mAh



BRAD MOLEN'S
HANDS-ON IMPRESSIONS



HTC One V

The baby bear of HTC's One series, the One V sports a 3.7-inch WVGA LCD display and decidedly less impressive specs. This low-end ICS handset clearly takes design cues from the HTC legend, with a dark gray, aluminum unibody, hardware keys and prominent chin. HTC wasn't forthcoming with specifics for its 1GHz single-core processor, and we were unable to get our hands on a working model, but given the scaled-back specs, we're willing to bet it won't be quite as snappy as its siblings.

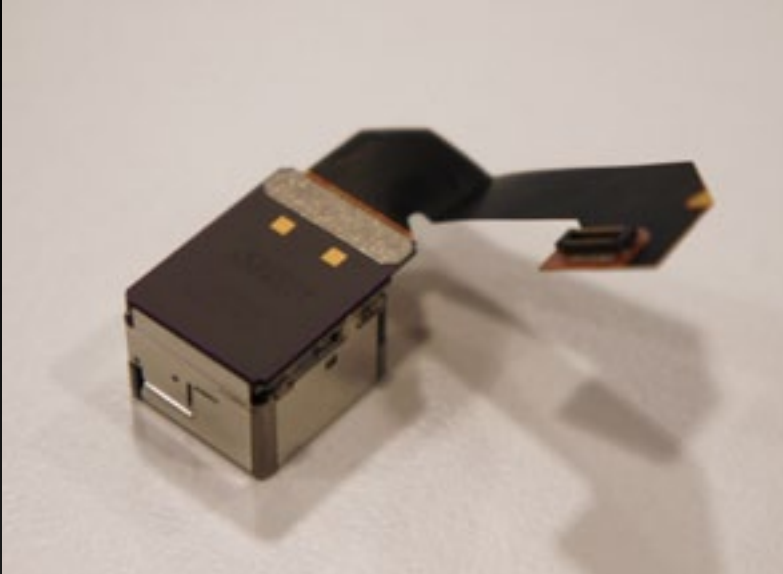
Key Specs

OS	Android 4.0
CPU	1GHz Single-core
Memory	512MB RAM
Storage	4GB
Display	3.7-inch WVGA LCD
Cameras	5MP (Rear)
Battery	1,500mAh



MAT SMITH'S
HANDS-ON IMPRESSIONS





Key Specs

OS	Symbian Belle
CPU	1.3GHz Single-core
Memory	512MB RAM
Storage	16GB
Display	4-inch ClearBlack LCD (640 x 360)
Cameras	41MP (Rear)
Battery	1,400mAh



BRAD MOLEN AND MYRIAM JOIRE'S
HANDS-ON IMPRESSIONS



Nokia 808 PureView

That's not a typo, Nokia's N8 successor, the 808 PureView, is packing a massive 41-megapixel front-facing camera. Expected to arrive in May at a price of €450, the camera phone is quite surprisingly running Belle OS, despite Nokia's "all-in" commitment to Windows Phone. In terms of appearance, the 808 bucks the thin trend for a bulky exterior, punctuated by the bulbous camera pod around back. Its backside is outfitted in hard, matte plastic, with the exception of the protruding Carl Zeiss lens and rather large flash. It might be the mother of all camera phones, but it's definitely not for everybody.



Nokia Lumia 610

The Lumia 610 may be a low-end phone, but it definitely caught our attention, thanks in part to its status as one of the first handsets to carry the latest build of Windows Phone 7.5. Set to land in Q2 for €189, the 610 could potentially be the first Windows Phone to expand to heretofore uncharted territories (Microsoft's latest Mango build opens Windows Phone to Chinese operators, among others). The design matches the price point, with inexpensive plastic and chrome touches, and the performance is what you might expect from a low-end ringer, but it's the pioneering potential that has us excited.



Key Specs

OS	Windows Phone 7.5
CPU	800MHz Snapdragon S1
Memory	256MB
Storage	8GB
Display	3.7-inch WVGA (800 x 480)
Cameras	5MP (Rear)
Battery	1,300mAh



BRAD MOLEN'S
HANDS-ON IMPRESSIONS





JOSEPH VOLPE'S
HANDS-ON IMPRESSIONS



Panasonic Eluga

The Eluga is built to impress. From its 4.3-inch qHD 960 x 540 OLED display to the unit's matte back, it sure is a beaut. However, despite the handset's aesthetic appeal, the performance is subpar. Powered by a 1GHz dual-core OMAP 4430, and running skinned Android 2.3.5, navigation chugs when you'd expect it to zip. A 1,150mAh battery and 8GB of internal storage will keep consumption habits in check. But hey, you can dunk it in water all you want. Look for it in Germany this April, with a Euro launch to follow and a taste of ICS this summer.

Key Specs

OS	Android 2.3.5
CPU	1GHz Dual-core OMAP 4430
Memory	N/A
Storage	8GB
Display	4.3-inch qHD OLED (960 x 540)
Cameras	8MP (Rear)
Battery	1,150mAh





Fujitsu Quad-Core Phone

We've finally managed to get some time with Fujitsu's incoming quad-core handset and it's pretty close to completion. The 4.6-inch display is bright and crisp — although the spokesperson was unable to confirm the screen tech, we suspect it's a high-resolution LCD display. Fujitsu's NX UI is a skinned version of Android Ice Cream Sandwich, with additional features courtesy of the "human-centric engine." It's still water-friendly, wielding a Tegra 3 chip and a 13.1-megapixel camera with the outfit's own Milbeaut image processor. The phone is being pitched to carriers across China, Europe and the US with a Japanese release this summer.

Key Specs

OS	Android 4.0
CPU	1.5GHz Quad-core Tegra 3
Memory	N/A
Storage	8GB microSD
Display	4.6-inch HD LCD
Cameras	13.1MP (Rear)
Battery	N/A



MAT SMITH'S
HANDS-ON IMPRESSIONS



MOBILE WORLD CONGRESS 2012





Sony Xperia P

Occupying a space between the S and U, The Sony Xperia P 4-inch handset boasts a company first — that WhiteMagic display tech — while incorporating the better-known hardware elements of its older stablemate. Unlike the instant impressiveness imparted by the S, this handset skews more average-to-normal where its combination metal-plastic build is concerned. The P runs Android 2.3.7 atop a 1GHz dual-core ST-Ericsson U8500 CPU, but should see a bump to a skinned version of ICS sometime soon. You'll find ports for USB and HDMI out, a SIM slot and an 8-megapixel rear shooter.

Key Specs

OS	Android 2.3.7
CPU	1GHz dual-core ST-Ericsson U8500
Memory	N/A
Storage	16GB
Display	4-inch Reality Display with WhiteMagic technology
Cameras	8MP (Rear)
Battery	N/A



JOSEPH VOLPE'S
HANDS-ON IMPRESSIONS



Sony Xperia U

The ill-concealed Xperia U combines a compact, idiosyncratic design with flourishes to add value to an otherwise ground floor device. With a 3.5-inch Reality display complementing its palm-friendly size, there's not much initially impressive about the phone. Below the hood, the U packs a 1GHz dual-core chipset, which powers a skinned Android 2.3.7 that Sony plans to ship the U with. ICS is on the way but it will sport the company's UX. As far as imaging goes, a VGA front-facer sits atop the screen, with a 5-megapixel shooter around back. You can snag this Mini-Me Xperia when it hits in mid-Q2.

MOBILE WORLD CONGRESS 2012



Key Specs

OS Android 2.3.7

CPU 1GHz Dual-core

Memory N/A

Storage N/A

Display 3.5-inch Reality Display

Cameras 5MP (Rear), VGA (Front)

Battery N/A



JOSEPH VOLPE'S
HANDS-ON IMPRESSIONS



Huawei Ascend D Quad

It's no secret that Huawei is intent on joining the big boys in the smartphone arena, and the Ascend D Quad is its most promising attempt yet. Immediately, our attention was drawn to the display, which boasts vibrant colors and excellent viewing angles. The device is being billed as the "world's fastest quad-core smartphone" with the company's own K3V2 CPU, clocked at 1.5GHz. This Android 4.0 beast sports a 4.5-inch 720p display, 8-megapixel rear camera, support for LTE and an 1,800mAh battery. We should see the Ascend D Quad in shops in Q2.



Key Specs

OS	Android 4.0
CPU	1.5GHz Quad-core K3V2
Memory	N/A
Storage	N/A
Display	4.5-inch qHD Super AMOLED
Cameras	8MP (Rear) VGA (Front)
Battery	1,800mAh



ZACHARY LUTZ'S
HANDS-ON IMPRESSIONS





Key Specs

OS	Android 4.0
CPU	1.3GHz Quad-core NVIDIA Tegra 3
Memory	1GB RAM
Storage	8GB (On-board)
Display	4.3-inch qHD (960x540)
Cameras	8MP (Rear), Unknown (Front)
Battery	N/A

ZTE Era

ZTE's addition to the quad-core Ice Cream Sandwich trend came in the form of the 7.8mm-thin Era. Featuring an 8-megapixel, 1080p-capable camera, a 1.3GHz Tegra 3 processor and an Iceria i450 HSPA+ modem, it's a cut above the other handsets ZTE had on display and felt reminiscent of the Nexus One.



SEAN COOPER'S
HANDS-ON IMPRESSIONS



ASUS Padfone

ASUS formally unveiled the shape-shifting Padfone – just like it said it would. Up front, the star of the show is that 4.3-inch, qHD Super AMOLED display. The phone is powered by a Snapdragon dual-core S4 chip and sports 16GB to 64GB of internal storage. Sure, you could use it as a 4.3-inch handset, but you can snag a station that turns it into a 10-inch tablet. You could also opt for a keyboard dock or a stylus that doubles as a receiver for calls. Get your affairs in order, as the Padfone is expected to ship in April.



DANA WOLLMAN'S
HANDS-ON IMPRESSIONS



MOBILE WORLD CONGRESS 2012



Key Specs

OS	Android 4.0
CPU	Dual-core Qualcomm Snapdragon S4
Memory	N/A
Storage	16 to 64 GB
Display	4.3-inch qHD Super AMOLED
Cameras	8MP (Rear) / VGA (Front)
Battery	1,520mAh



Samsung Galaxy Beam

At 12.5mm thick, the Samsung Galaxy Beam is being billed as the “world’s thinnest projector phone.” That on-board projector boasts nHD (640 x 360) resolution, 15-lumen brightness and projects HD images up to 50 inches wide. The inclusion of the projector proved unobtrusive, with a dedicated button providing for convenient beaming. It’s slated for a Q2 release in select (and undisclosed) markets and should come accompanied by at least a few docks dedicated to stabilizing and amplifying sound.

Key Specs

OS Android 2.3

CPU 1GHz Dual-core
U8500 Cortex A9

Memory 768MB

Storage 8GB (On-board)

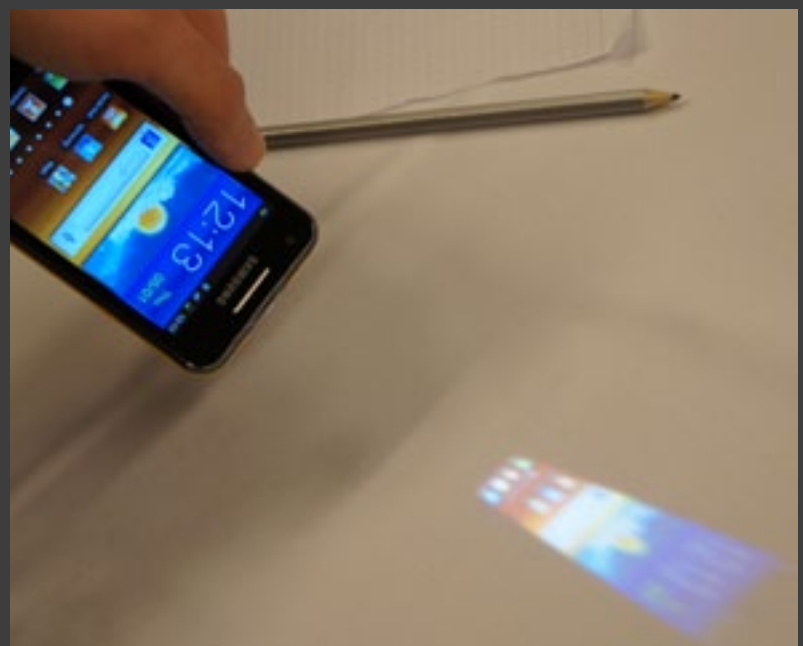
Display 4-inch WXGA
(800 x 480)

Cameras 5MP (Rear), 1.3MP
(Front)

Battery 2,000mAh



BRAD MOLEN'S
HANDS-ON IMPRESSIONS



Samsung Galaxy Tab 2 (10.1)

Hiding behind closed doors at MWC, Samsung's latest 10.1-inch tablet is nearly identical to the original Galaxy Tab 10.1 in the specs department: 1280 x 800 display, 1GHz dual-core processor, 3-megapixel rear-facing camera. It does, however, come with Ice Cream Sandwich on-board and actually increases in thickness from 8.6mm to 10.5mm. It also sports a refreshed back cover, this time in matte silver. It lacks the LED flash of the original but adds a microSD slot. It's expected to ship in the UK in March (with other, undisclosed markets to follow) and could very well be priced below its predecessor.



MOBILE WORLD CONGRESS 2012



Key Specs

OS	Android 4.0
CPU	1GHz Dual-core
Memory	1GB RAM
Storage	16 or 32GB
Display	10.1-inch WXGA (1280 x 800)
Cameras	3MP (Rear), VGA (Front)
Battery	N/A



DANA WOLLMAN'S
HANDS-ON IMPRESSIONS



Samsung Galaxy Tab 2 (7.0)

Like the Galaxy Tab 2 (10.1) this 7-incher shares much of the same specs with its predecessor but ends up a bit thicker, hitting 10.5mm compared to the Galaxy Tab 7.0 Plus' 9.96mm. However, it also falls behind in a few key areas — its CPU clocks in at 1GHz instead of 1.2GHz — making it a prime candidate for a slimmer price tag. We were impressed by its responsiveness and found only one significant fall back in the inconsistent performance of its accelerometer. We'll have to wait and see if it's worth the (undisclosed) asking price when it hits the UK in March.

Key Specs

OS	Android 4.0
CPU	1GHz Dual-core
Memory	1GB
Storage	8, 16 or 32GB
Display	7-inch WSVGA (1024 x 600)
Cameras	3MP (Rear), VGA (Front)
Battery	4,000mAh



JOSEPH VOLPE'S
HANDS-ON IMPRESSIONS





Samsung Galaxy Note 10.1

Key Specs

OS	Android 4.0
CPU	1.4GHz Dual-core
Memory	1GB RAM
Storage	16, 32 or 64GB (On-board)
Display	10.1-inch WXGA (1280 x 800)
Cameras	3MP (Rear), 2MP (Front)
Battery	1,300mAh



DANA WOLLMAN'S
HANDS-ON IMPRESSIONS

If you're a die-hard stylus fan looking for more screen real estate than a phone can offer, Samsung's attempting to fill that void with the lovechild of the Galaxy Note and Galaxy Tab 10.1, aptly named the Galaxy Note 10.1. In terms of surface-level looks, it's not much different from the original 10.1, although it is a bit thicker and shinier, making it a prime target for fingerprints. While some apps were slow to load, it appears Samsung's tailored the software to make it ideal for stylus (er... S Pen) input. In fact, it may be even better suited to the stylus than its little brother.





REVIEW

Razer Blade

Razer's first gaming laptop is impressive, though marred by minor, yet head-scratching flaws. Barring those (and its sky-high price), Razer has a winner on its hands.

BY DANTE CESA

Typically, when a company wants to meet, you expect more of the same — not a change in strategy, nor a decision to enter an entirely new product category. So when Razer wanted to meet us one bright, oddly cold San Francisco morning last August, we certainly weren't expecting to meet its CEO, Min-Liang Tan, and we definitely weren't prepared to find a 17-inch prototype laptop, henceforth known as the Blade.

Shaving puns aside, we listened to Tan proudly wax on about the results of nearly three years of development, much of which involved recruiting a bevy of talent from the now-defunct OQO. What they'd accomplished, according to Tan, was the "world's first true gaming portable." An audacious statement, sure, especially considering the Blade was to be Razer's foray into the PC market. No matter. Tan's impetus was clear: the



outfit would cater to gamers who'd been left in a vacuum after formerly gaming-obsessed companies sold out, leaving the segment to languish. His angle, however, would be different. The Blade wasn't going to be a gaudy, gargantuan, no-holds barred device with outright performance in mind. No, instead the 0.8-inch thick aluminum beaut would attempt to straddle the worlds of portability with performance, seeking to hit a perfectly balanced middle ground.

That sounded reasonable, but judging by reactions from most of you, the decision to stuff this \$2,799 rig with a mid-range GeForce GT 555M card wasn't. Nor was the call to kit it with a paltry 320GB of rotational storage. Razer would rectify the latter in December, promising 256GB SSDs for all — a

concession that would push shipments back, well, until now. Still, even after toying with it briefly at CES, our impressions were ultimately shallow, as we couldn't get much of a feel for it in that controlled environment. Which brings us to the present day, and with Razer graciously airdropping a Blade onto our doorstep, does this experimental laptop stand up to its maker's gutsy claims? Or will those who've shelled just shy of three grand be sorely disappointed with its execution? Well, there's only one way to find out, and that's to read on.

Look and Feel

We hate using the term, but we will anyway: the Blade is sexy. That's a grossly overused word, sure, but if we ever really meant it, that time would

be now. The Blade feels premium in a way that's difficult to quantify, but we're sure it has something to do with that sturdy shell and relatively thin profile. There's no question in our mind, though, its inspiration, down to the minutiae, borrows heavily — and we mean *heavily* — from the 17-inch MacBook Pro. Details like its latchless design, sunken chiclet keyboard, to the shape of its outer shell down and its identical hinge. But we're perfectly okay with that, as they've been remixed into something far more arresting.

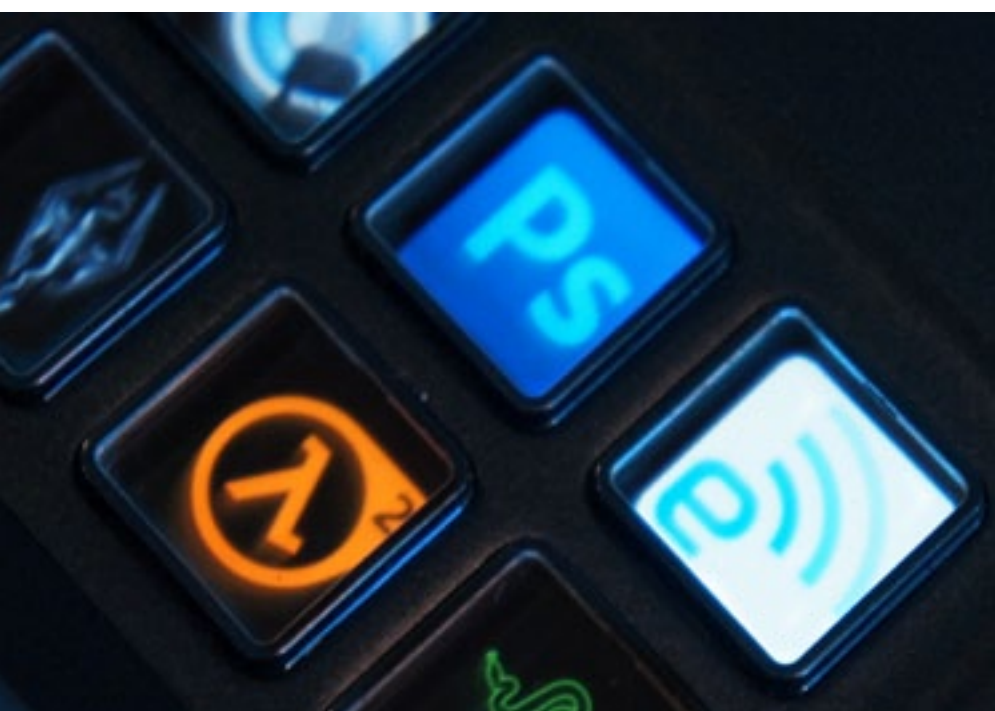
That luxurious experience begins not with the hardware, but the elaborate packaging. To say we weren't expecting much would be an understatement — can you remember the last time you unboxed a PC laptop? — but how could you not, with the faux-carbon fiber weave adorning the box above? Not to mention those gorgeous asymmetrical cut-outs, giving way to a Razer-green layer beneath, subconsciously begging you to peel it away. Lifting off the top half reveals an interior dominated by the rather large laptop, which you'll conveniently lift out with a similarly hued green ribbon. Underneath, you'll find the usual suspects: a pouch containing manuals, stickers and so forth, alongside a custom oblong power brick. So far so good.

To achieve that relatively thin 0.8-inch profile, Razer's kitted its offering with a sparser number of ports than you'd find on a traditional "gamer-focused" machine. On the left side, just past the

beefy cooling vent, there's power, Ethernet, HDMI, three USB ports (one of the 3.0 persuasion, demarcated in green) and a headphone jack. That's it connectivity-wise, as on the right you'll find another exhaust (identical in size and placement to its leftward cousin) and a Kensington lock slot about half way down. It's around this time you realize the Blade is devoid of an optical drive, so those thinking about installing games the *old-fashioned* way better invest in an external unit or get cozy with a service like Valve's Steam or EA's Origin. Other exterior highlights worth mentioning are a backlit logo on the lid, which glows green, and an additional set of chrome-accented vents festooning the base.

Lift the lid and you'll see that sparse aesthetic extends onto the laptop's interior. Which, apart from the already mentioned backlit keyboard and LCD-stuffed trackpad, is home to a rather large power button, which glows green when the laptop is powered on, and pulses when the machine's asleep. The only remaining features crammed onto the deck space are a speaker grille that runs the entire length of the hinge, and a chrome-ringed webcam, just north of the screen.

While tastefully designed and well-built, unfortunately not all is perfect in the land of the Blade. There's one niggling flaw that taints the otherwise top-notch experience, and it has to do with difficulties in prying the latchless notebook open. Either the hinge isn't lubri-



cated enough, or the front-portion of the system isn't privy to enough mass, but with the unit shut, attempts to lift the display are met with frustration, as its bottom (read: computer-housing portion) comes along for the ride. You eventually adjust to opening it more slowly and with less force, or by holding the base while you attempt the maneuver — neither of which, we think, are satisfactory options for a machine this expensive. It's an unfortunate oversight (or engineering compromise, perhaps)

and our only real gripe with the hardware, though unfortunately it rears its head every time you open it.

Keyboard and Touchpad

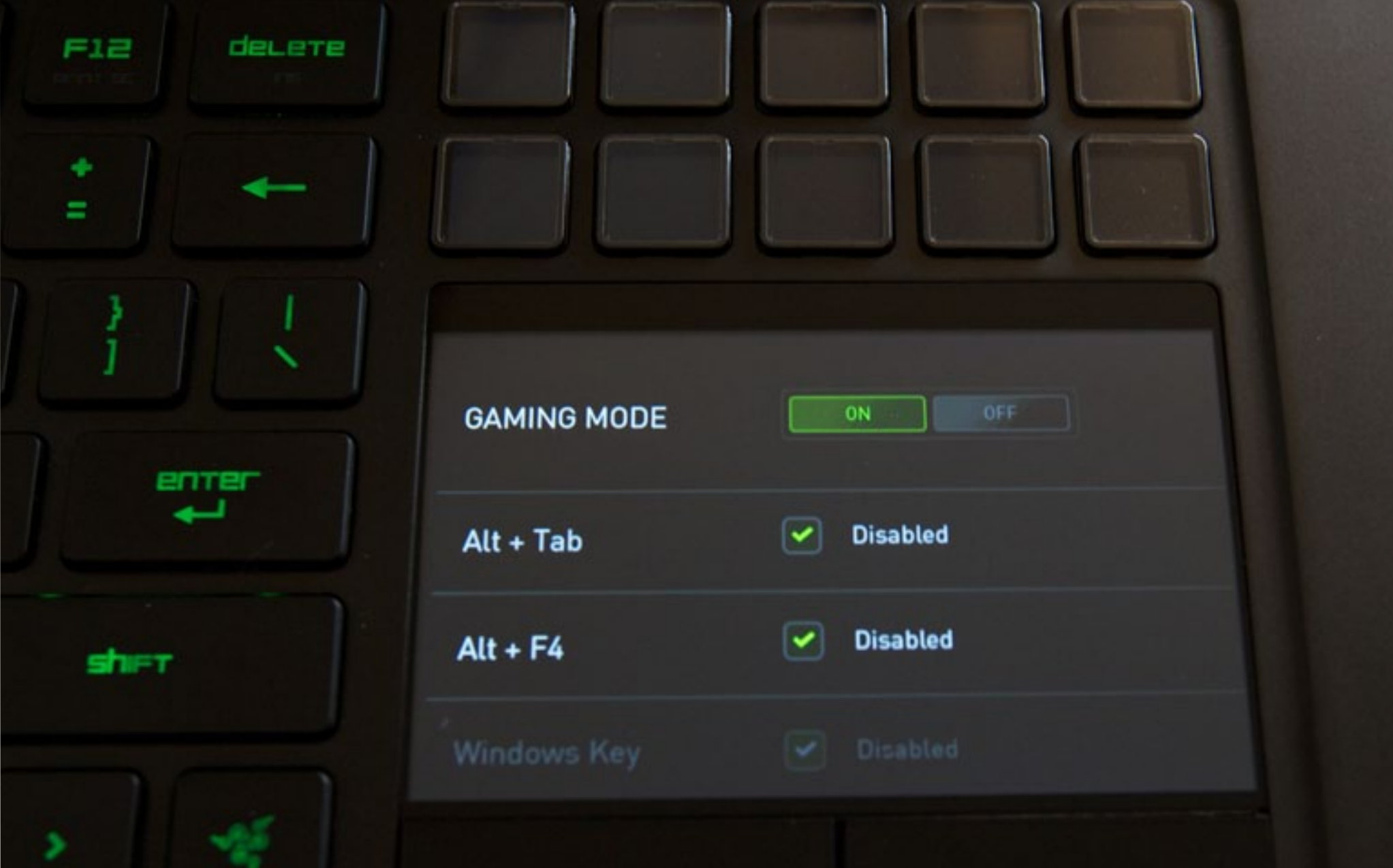
While the rest of the Blade isn't functionally different from other laptops, its party piece, the LCD-toting touchpad and the ten configurable buttons directly above it, are certainly novel. We'll begin with the mousing device. As best as we can tell, its top-most layer houses a rather thick layer of tempered

plastic, which unfortunately introduces more friction than we'd like, in addition to the fact that it just doesn't feel as premium as the rest of the laptop. Although in fairness, with time (and of course, grease) swipes do become easier. But for what it lacks in feel, the pad makes up for in accuracy: we found tracking excellent and can happily report that for once we've got a trackpad that can actuate two-finger scrolling in a non-frustrating fashion. Like all PC scrolling, it's linear — there isn't any spiffy physics-induced acceleration of content here — but the Synaptics pad was more than responsive otherwise. Multi-touch also makes an appearance, naturally making that previous two-finger scrolling endeavor possible, as well as a few others: like pinch-to-zoom, two-finger rotations and three-finger swipes which provide a modicum of functionality depending on what app has focus. Those additional gestures weren't nearly as polished, but seeing as they're less generally useful, we didn't mind much, except for the last, which you'll have to be rather deliberate to actuate as you swap between pre-programmed sets of icons in one mode of trackpad.

But stuffing a trackpad with an LCD can only get you so far, which is where the company's Switchblade-UI comes in. After logging into the company's Synapse service, the ten keys above burst into life. From the initial screen above, you can use the touchpad as you normally would, or throw it into one of ten alternative modes — nine of which

hijack all trackpad mousing functionality altogether (leaving all cursor control to a dedicated external mouse). Returning to the default mode is thankfully easy, though, as one hits the dedicated Razer button in the bottom right corner of the keyboard. We spent most of our time in the first mode, which is the one you'll want, as this is the only one in which those delectable ten keys can be configured as you please. To customize them you'll use the company's Synapse utility, which is where you can create and save multiple profiles — a fancy name for groupings of your button-machinations. Within each profile, you can configure infinite sets of ten keys, which you'll then swipe between with that three-finger swipe we mentioned earlier.

From Synapse those buttons can be assigned to mimic any key press, any mouse button, a pre-recorded macro or alternatively launch a program. Once you've assigned a function, you can optionally choose an icon (your own, or one of the company's pre-sets) and voila, you're good to go. While some of you will no doubt painstakingly go through and create multiple profiles for all your favorite games, we reveled in primarily using this functionality as our application launcher. With one-touch access to our favorite ten programs, and only a swipe away from twenty, we nary had to touch the Windows taskbar or desktop shortcuts to launch our browser, Photoshop or whatever game we pleased. It's an Optimus ~~Mini-Six~~ Mini Ten on



our laptop and it's the next best thing since sliced bread.

Believe it or not, that's only the trackpad's first view. Tapping the Razer key and returning to its initial screen, the next three options are widget-y type screens: a numpad, a mode to record macros and a pane to enable and tweak settings pertaining to "Gaming mode." Following that is the browser (more on that later), which also serves as the basis for the following four: YouTube, Facebook, Twitter and GMail. Apart from YouTube (which is more customized and gets a custom mapping of buttons), these all load mobile versions of those sites, which can range from workable (Twitter), frustrating (Facebook) or pretty much unusable (GMail). The final and tenth function, is a clock —

something we'd have loved to use as our trackpad's background (instead of the persistent Razer logo), but curiously this mode blocks our mousing endeavors, despite being non-customizable and unresponsive to gestures.

Circling back to the touchpad's browser, it actually runs a separate process of Internet Explorer — the giveaway being the tell-tale clicking sound effect you'll hear when you tap links. When surfing, the bottom five keys swap to pertain to navigation, with the last two allowing you to bringing up URL and search fields which you populate with input from the keyboard. It's serviceable when you need a walkthrough, but no way to store bookmarks or change the default homepage, we found it simply quicker to pull out a smartphone,

reach for a tablet, or even use the Windows key to hop out of a game and open a real desktop browser to find what we were looking for.

That's unfortunate, because while stuffing a screen underneath a trackpad sounds like a geek's dream, the software powering the trackpad is lackluster. In a day and age with mobile devices housing far richer experiences, there isn't any way you'll be using the mobile website of Facebook here, over the purpose-built app on your phone. In our time with it, the trackpad was a conversation starter, sure, but ultimately the widgets onboard need a significant investment of time and resources to make them practical enough for us to recommend them. You could argue that Razer should just run Android on the touchpad instead, and while that would assuage some of our concerns, if given the choice, we'd just dump the screen entirely and put those savings toward a cheaper starting price. Put simply, had the screen beneath the Blade gone "missing," from prototype to production, we'd have been just as pleased in our time with it — keep the ten customizable buttons above it, though — those can stay.

When it came to the keyboard, there was better news, as we've got unwavering praise for the tactility of the unit on the Blade. We'd have preferred if the entire deck were shifted a bit northward, allowing for a roomier palm rest, but now we're just nitpicking, as that chiclet keyboard is top-notch. As you'd expect, every key is backlit, though for whatever

reason, despite the F-row being backlit, the secondary Fn-based controls that co-inhabit them, aren't. That sets you up for some inconvenience when adjusting brightness or volume in low-light, but we'll hazard that before long you'll have their respective F1-F12 mappings committed to memory. Lastly, we're told it's anti-ghosted too, which might not have made a huge difference when typing this review, but certainly caters to the kind of serious gamers for whom Razer seeks.

Display and Sounds

If one piece defines our time with the Blade, it's the gargantuan 17.3-inch display. Defining the unit's massive footprint, the full 1080p matte panel (1920 x 1080) is a particularly bright spot. Ripe with color and vibrant from all angles, we had no complaints about the panel's black levels, contrast or brightness. White balance skews a little blue, but nothing that couldn't be rectified with some calibration. Finally, did you hear us say it's matte? Because it is, and that's your only choice. Kudos, Razer — death to glossy displays.

As splendid as its primary display is, our general feeling of disappointment with the secondary LCD found underneath the trackpad continues. Its certainly not of the same caliber, suffering primarily from a lack of brightness and poor black levels. Weak contrast aside, the reflective screen is more squint-inducing than we'd like, rendering it especially dim in bright environments. We also noticed its tendency to

BENCHMARK	PCMARK VANTAGE	3DMARK06
Razer Blade (2.8GHz Core i7-2640M, GeForce GT555M, 8GB)	14,379	11,556
MSI GT683DXR (2.2GHz Core i7-2630QM, GeForce GTX 570M, 16GB)	7,210	16,862
Toshiba Qosmio X775-3DV78 (2.0GHz Core i7-2630QM, GeForce GTX 560M, 8GB)	7,900	15,169
HP Envy 15 (2.4GHz Core i5-2430M, AMD Radeon HD 7690M 1GB)	7,210	8,839
Dell XPS 15z (2.7GHz Core i7-2620M, NVIDIA GeForce GT525M)	8,023	7,317
15-inch Samsung Series 7 Chronos (2.2GHz Core i7-2675QM, Intel HD 3000 / AMD Radeon HD 6750M 1GB)	7,824	8,891
Sony VAIO SE series (2.4GHz Core i5-2430M, Intel HD Graphics 3000 / AMD Radeon HD 6630M 1GB)	5,632	6,898
2011 15-inch MacBook Pro (2.2GHz Core i7-2720QM, Radeon HD 6750M / Intel Graphics 3000)	8,041	10,262

Higher is better

diagonally shear while displaying fast-paced content — say like when rapidly scrolling a webpage, or whilst watching video with fast-paced action. Seeing as you won't be using it much, neither are deal-breakers, but we'd hoped for more when we were told it was equivalent to a smartphone panel. In contrast, the ten programmable keys sitting directly above (all powered by a separate LCD, we'd imagine), are bright and delectably tactile as ever.

Which brings us to the Blade's acoustic performance. Unlike some of its flashier contemporaries, Razer didn't team up with a speaker manufacturer to serve up audio on the Blade. Setting aside the question of whether or not marketing

infused tie-ups actually derive better sound, the unfortunate fact is the audio experience on the Blade is woefully sub-par. Our unit wasn't particularly loud, but more alarming was the complete dearth of any meaningfully low bass notes. Not unlike listening to earbuds lying on your desk, the sound lacks any warmth — which is unacceptable, given that \$2,799 price tag. You can ameliorate the situation slightly by flipping the included Dolby Home Theater software on, but ultimately software enhancements can only go so far. We know, serious gamers will plug in a proper headset, but it's definitively the weakest area of the Blade — so bad mind you, we initially questioned if our unit was faulty.

Despite being tuned for balance, the Blade eked out a rather respectable showing in our usual collection of benchmarks. Armed with a 2.8GHz Core i7-2640M CPU, it notched a speedy 14,379 in PCMark Vantage. It wasn't nearly as triumphant in the graphics department, where it was held back by that GeForce 555M card, which managed 11,556 in 3DMark06 and P1,536 in 3DMark11.

Performance isn't all about raw numbers, though, and happily the Blade doesn't disappoint in real world use. Throughout our testing, the Blade was able to handle typical computing tasks with aplomb: heavy web browsing, Photoshop editing and serving as an Engadget workhorse were all dealt swiftly and without complaint. It's when you ask the Blade to serve as your gaming compatriot, however, that things begin to get a little murky. While after-work *Starcraft II* matches cranked just shy of ultimate posed no problem (with frame rates consistently in the high forties to fifties), we can't say the same about newer titles which invoke considerably more strain. While playing *The Elder Scrolls V: Skyrim*, for example, we reeled graphical settings to high to make the game playable — we're talking frame rates in the low thirties at full resolution. With something like *Battlefield 3* on the other hand, we were able to eke out a similar mid-30FPS from medium settings, again at full resolution.

When it came to heat dissipation, we had no complaints in our time spent



with the Blade. As you'd expect, things get a little toasty while running full tilt, but even then it won't lacerate, and for general purposes it kept decently cool. Fans weren't obnoxiously loud either, however, in time you'll notice the fairly aggressive leftward unit which has a tendency to flare up any time you encounter peaky CPU work. We weren't particularly dismayed by the behavior, but it's definitively noticeable, perhaps more so here, as the Blade's SSD makes it silent otherwise.

Finally, thanks to its aforementioned reliance on flash storage, loading times, installs and boots were speedy, with the latter clocking in at 17-18 seconds from a cold start to the Windows login screen. Running the disk benchmark ATTO informed us that peak reads happened at 467MB/s and writes at 362MB/s. Finally, we'd like to applaud Razer for making the right choice in delaying shipment to opt for that SSD — in 2012 as far as we're concerned, it's a must-have in a machine in this price range.

So we've determined it isn't quite the graphical sprinter, but can the Blade



still come out ahead in the marathon that's battery longevity? In a word no. As shown above, running Engadget's video-rundown test at roughly half brightness reveals things are a little more complicated than you might have initially thought. Yes, the Blade's less power hungry graphics are primarily responsible for it running circles around its more pudgy, brute-ish rivals. Still, that's not saying much, as being just shy of three hours, it falls considerably short when compared to more mainstream notebooks. Still, that bests MSI's 15-inch GT583DXR

by a full 20 minutes despite wielding a larger screen (but with a lesser card) and demolishes the more comparable 17-inch Qosmio X775's by a whopping hour and a half — all, in a thin profile.

Alas, if you were planning on a sojourn sans charger, you'll be out of luck. Even with casual use and exercising brightness restraint, we were only able to coax just shy of three and a half hours of work out of its 60Wh battery — dwindling down to around three with full brightness. For those daring to game on the go, unlike other laptops which'll significantly pare down their performance, the Blade will cheerfully run at full throttle for about an hour before simmering down. Ultimately neither are legendary, we know, but compared to other laptops, definitely workable.

TABLET	BATTERY LIFE
Razer Blade	2:57
MSI GT683DXR	2:40
Toshiba Qosmio X775-3DV78	1:26
2010 HP Envy 17	2:10
HP Envy 15	4:07
Dell XPS 15z	3:41 (Optimus disabled) / 4:26 (Optimus enabled)
15-inch Samsung Series 7 Chronos	5:47
2011 15-inch Mac-Book Pro	7:27

Software

Seeing as its exterior is devoid of all stickers — save for one — why would Razer go and mess with its innards? Thankfully it hasn't, leaving the Blade free of additional software or crapware, with an almost clean install of Windows 7 Home Premium. And we mean "almost," as you'll still get Dolby Home Theater software and a copy of Razer's Synapse app — the later of



which you'll want to configure that those LCD buttons.

Configuration Options

Naught. We're serious. There's only one way to get a Blade and that's to pay for this lone \$2,799 config.

The Competition

The market for laptops that cost nearly three large is by no means sprawling, but indulge us for just a moment while we compare the Blade to other systems that compete in this arena. We'll begin with the granddaddy of them all, the Alienware M17x. Though configurations of that beastly guy start at \$1,499, it can be stuffed with all sorts of doodads, pushing it beyond the Blade's \$2,799 price.

To match the Blade's price tag, we began with the \$1,899 machine and kitted it with a 2.5GHz Core i7-2860QM, 256GB of solid state storage and opted for the 1080p panel upgrade. Standard on that model is 8GB of RAM (identical to the Blade) as well as the much more potent GeForce GTX 580M. The combination of a quad-core chip and graphics would make mincemeat out of the Blade, but at twice the thickness and double the poundage, we'll leave it up to you if that's worth the trade-off. Still, it merits noting that even the base \$1,499 model with its quad-core i7 and Radeon HD 6870M would most certainly give the Blade a run for its money.

Then there's something like the MSI GT780DXR. Like the M17x, it's not as



pleasing on the eyes, but at \$1,799 it's hard to dismiss its bang-for-your-buck specs, which include: a Core i7-2630QM, 16GB of RAM, dual 750GB drives and the beefy onboard NVIDIA GTX 570M. When we reviewed its smaller 15-inch brother, we took issue with some of its cheap materials — like an abysmal keyboard and bargain-basement glossy plastics — but one can't deny the results of its internals. Ultimately, the same caveat applies here though, you'll have to decide how much you value portability while hulking two-inch thick machine such as this.

We have yet to review it, but we'd be remiss if we didn't mention Samsung's Series 7 Gamer. Like some of its contemporaries, it, too, has a quad-core Core i7, 1080p 17-inch display, yet we're unsure on how punchy it'll be with its ho-hum

Radeon HD 6970M. You're probably looking at better build quality than say MSI's offering, and we think rather striking in the optional red or marigold yellow hues. We'll find out how good it is when it ships in April, but for \$1,799 there's another gaming option at under two grand to put on your radar.


Finally, this is a bit of an apples-to-oranges comparison — insofar that Apple doesn't make a "gaming" focused laptop — but it's worth mentioning the 17-inch MacBook Pro, as it, too, is known for offering a slim profile, given its otherwise sprawling dimensions. Starting at \$2,499, you've got to tack on additional \$200 for 4GB of RAM, \$500 for a 256GB SSD and \$50 for the anti-glare display to rival the Blade in the spec department. For those keeping track at home, that's \$3,249 — a

configuration with a faster quad-core i7 paired with a slower Radeon 6770M GPU. That's a hefty chunk of change for a machine that's roughly as thin as the Blade (albeit at 0.9 inches, somewhat thicker), yet also one that's devoid of a hinge and speaker problems that blemish Razer's offering.

Wrap-Up

So where does Razer's first foray into the PC realm leave us? On the one hand, this is one beautiful, well-made, powerful, impossibly thin laptop. On the other, you'll need a stack of cash to the tune of \$2,799. No matter how you slice it, that's a lot of dough to shell on a computer from a company that's just getting its feet wet in the category. Frankly, you wouldn't be crazy to sit this one out, with flaws like abysmal audio, a disobedient hinge and the indisputable fact that most of the latest gaming titles give this guy a run for its money. Additionally, there's that LCD-trackpad, which despite oozing cool, is destined to be more of a gimmick than must-have, at least until Razer invests in some better widgets.

Ultimately, though, the Blade was never about specs, and despite its maker's penchant for calling it a "gaming" machine, it's really just a striking, fast and beautiful laptop. Despite its flaws, the Blade is greater than the sum of its parts. We're cognizant \$2,799 is a tough pill to swallow, though, and despite our rational selves saying "no" we've nonetheless grown quite attached after spending a week with it. For those of

you with that kind of dispensable cash, go for it — who knows, you've probably also got enough laying around to build a serious dedicated gaming rig. Personally, we're waiting for Razer to ditch the LCD-touchpad (but keep the customizable keys) and offer a similarly specced 15-incher for around two grand. Razer will *really* have a winner then, and yes, we'll take two. 

Dante's been tinkering with gadgets since age 4. If he's not yodeling, he's out aimlessly wandering in SF.

BOTTOMLINE

Razer Blade

\$2,799

PROS

- Customizable LCD keys
- Absolutely gorgeous
- Outstanding fit and finish

CONS

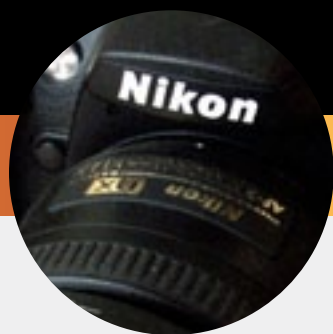
- Abysmal audio
- Middle-of-the-road graphics
- Finicky hinge

» Razer's first gaming laptop is impressive, though marred by minor, yet head-scratching flaws. Barring those (and its sky-high price), Razer has a winner on its hands.

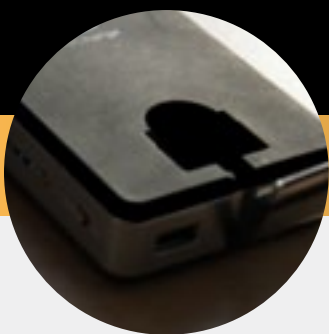
>> IN REAL LIFE

Welcome to IRL, an ongoing feature where we talk about the gadgets, apps and toys we're using in real life and take a second look at products that already got the formal review treatment.

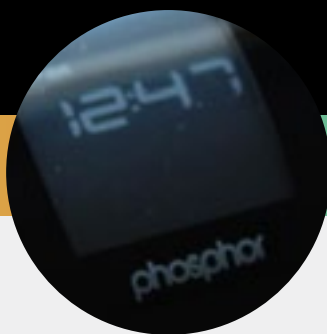
1.



2.



3.



Nikon D90, myCharge Portable Power Bank 6000 and Phosphor's World Time Sport

BY ENGADGET STAFF

Desperate times call for desperate measures — namely, new gadgets. Disappointed with his Droid Charge's ever-depleting battery capacity, Tim took a \$100 portable charger for a spin to see if he could eke out a little extra runtime before racing for an outlet. Meanwhile, Dan agreed to wear his first E-Ink watch after his analog Fossil timepiece outlived all compatible wristbands. Rounding things out, we have a more traditional account of gadget nostalgia from Don Melanson, who

explains why he won't be replacing his aging D90 anytime soon.

Nikon D90

Not all obsolescence cycles are created equal. In the days of one or two megapixels, digital cameras fell victim to a particularly rapid refresh schedule. In more recent years, however, digital cameras have become a considerably more stable investment, especially when it comes to DSLRs. A little over two years ago I bought a Nikon D90



(itself released in 2008), and I've yet to find a compelling enough reason to replace it.

Nikon itself has, of course, since replaced the Nikon D90 with the D7000, and by all accounts it is a noticeably better camera. In particular, it's far better with video; the D7000 does 1080p with autofocus, while the D90 is

stuck with 720p and manual focus. But, video aside, the D90 hardly feels dated, or any less useful, as some other consumer electronics from 2008 now do.

Indeed, I'm still learning how to get the most out of it, and a recently acquired 35mm prime lens has almost made it feel like a new camera. As impressive as the D7000 and other

newer DSLRs are, however, I'm not sure I'd buy one if I was in the market for a new camera today. The models that most interest me these days are things like Fujifilm's X10 and X100, or Sony's NEX-

7, which offer portability with far fewer trade-offs than earlier shooters did just a few years ago. Still, if video isn't a prime concern, I wouldn't hesitate to recommend the D90 if you can find one at a good price — it could easily serve you well for years to come.

— *Donald Melanson*

Powerbag myCharge Portable Power Bank 6000

When I was given the opportunity to test a myCharge Portable Power Bank 6000 for a little while I couldn't resist. The name was perfect, because I'd be using it to augment the increasingly poor longevity of my personal phone, a Droid Charge. When I reviewed it, as you may remember, I praised its (relatively) long battery life. So convinced, I went out and bought one for myself and it was great — for a few weeks. As the charge cycles mounted, battery life dropped off a cliff and now I struggle to get eight hours of untethered freedom. Increas-



ingly disappointed in my Charge, I was happy to try out a myCharge.

It's a 6,000mAh external battery that packs both mini- and micro-USB plugs plus an Apple dock connector and even a full-sized USB port. Sadly it can't jump-start a car, but with all those connectors it can give some juice to just about anything else under the sun. For charging it has a micro-USB input and a series of handy LED indicators on the side that blink merrily when juicing. On my Charge I managed just short of two full charges, which isn't bad. Even better, it has the requisite oomph to power up Apple's tablet, taking my depleted iPad 2 up to an 80 percent charge before itself petered out. For \$100 it earns high marks for compatibility and convenience, plus the happy charge indicator lights are a nice touch, but given the thing is almost twice as thick as my phone I think I'll just stick with carrying around a spare battery or two.

— *Tim Stevens*



Phosphor World Time Sport Watch

A year ago, I realized my smartphone had supplanted my watch as my primary timepiece. The analog Fossil watch with the cascading Matrix-style digits I'd worn since 2006 had exhausted the company's supply of leather cuffs, so a new wrist-borne statement timepiece was required. Serendipitously, Phosphor got in touch and asked if I wanted to try its new E-Ink watch. Once I'd overcome my snobbery toward digital watches, I gave it a go.

The World Time Sport allows you to switch between white-on-black, black-on-white and calendar modes or, best of all, one of 24 different world time regions at the swipe of a finger. This turned out to be very useful for anyone who deals with colleagues and companies based in New York, California and China. Like a Kindle and other e-read-

ers, the display is excellent in daylight and useless in the dark. It sports a capacitive touch panel (divided into two sections) that you use to control the watch with a series of taps and swipes. Getting the hang of the arcane code (and learning not to stand with my hand over my watch) took some effort, but once mastered you can flick between settings with ease.

Its functional, black rubber strap is the very definition of utilitarianism and it's certainly not a timepiece everyone can pull off. However, like the best things in life, it's not ostentatious; it's interesting. People have asked me why my watch flashes to refresh every minute and where the buttons are, cooing as I show them how it works. It may not be the most useful device in dark rooms, but it's got storming battery life and, face it — it's pretty cool, too.

— *Daniel Cooper*





MOBILE BURN'S
EDITOR-IN-CHIEF,
MICHAEL ORYL,
DISCUSSES GOOGLE'S
INFLUENCE AND
LIVING IN A "WIRELESS
BLACKHOLE."

MICHAEL ORYL

Q&A

What gadget do you depend on most? A Motorola Droid RAZR Maxx — for now, at least. Which-ever Android smartphone I'm using at the moment becomes my primary email hub and gets used for scanning news, light story editing and keeping up with Google+ and Twitter.

Which do you look back upon most fondly? I've had countless phones over the years. My favorites are probably my Ericsson R520 prototype, in the "tiger stripe" orange / silver paint scheme, and my Nokia 9200 Communicator. Both stood out visually and offered functionality that was not available from competitors at the time.

Which company does the most to push the industry? While I think Apple gave the mobile industry the single largest push ever when it launched the original iPhone, I think Google has done [the most] for mobile as a whole. Google doesn't always get everything right the first time (Buzz), but it usually gets there in the end (Google+). Google just offers so many services that people have grown to rely on. I mean, where would we be today without Google Maps?

What is your operating system of choice? I run Windows 7 on the desktop, and Android on my phones. I've spent time with Mac OS over the years, and truly hated Vista, but have found Windows 7 to be a good fit. I tend to use Android devices because of the number of them that are available and the fact that I use Google Voice.

What are your favorite gadget names? I think HP's TouchPad is well named, evoking a better mental picture than even Apple's iPad.

What are your least favorite? The Palm Pre is probably my least favorite short device name. Palm named its device after a prefix, and the writer in me disapproves. Samsung and Sprint's Galaxy S II, Epic 4G Touch (with comma) is just stupid. It's the Chrysler K-Car of smartphone names, the obvious result of a committee trying to make everybody happy. And failing miserably.

Which app do you depend on most? TouchdownExchange by Nitrodesk. It's the best Exchange client on a mobile device I've ever used. Its folder support is unmatched, and the developer is very responsive to the needs of the customer.

Despise is a strong word, but I really don't need to see when my friends check-in at the office each day. TMI.

What traits do you most deplore in a smartphone? Poor battery life is high up there for me, but I'm also sick of how generic looking most (non-Apple) smartphones are today.

Which do you most admire? Beauty, oddly enough. I love user interfaces, and a beautiful UI will keep me entertained for endless hours. I really love the look of the MIUI ROMs for many Android smartphones, for example.

What is your idea of the perfect device? The mere notion of a "perfect device" gives me indigestion. What's perfect for one person is awful for the next, and what's perfect for me right at this moment might not work tomorrow morning. But, in general, I like long battery life, pocketability, and a good camera.

What is your earliest gadget memory? It's an old 126 format film camera I received when I was six years old. I felt like a king when I received that.

What technological advancement do you most admire? I'm really impressed with how NVIDIA went about building the Tegra 3 platform. In particular, I love the concept of a low-power fifth core in

what is normally touted as a quad-core processor.

Which do you most despise?

ANSWER

What fault are you most tolerant of in a gadget? It would probably be weight. I'm a big guy who spends most of his time at a desk. A very heavy smartphone, for example, doesn't bother me much when it's sitting upon my desk.

Which are you most intolerant of? While my initial instinct was to beat the poor battery life horse a bit more, I'm actually most offended by bad user interfaces. It amazes me how some absolutely lousy products from big companies with real resources ever get on the market.

When has your smartphone been of the most help? Every time I'm in an unfamiliar location and use it to find my way. Paper maps are for luddites.


What device do you covet most? Any number of Canon's top-end

professional cameras. I would love to have a Canon EOS-1D X, for example. I just love cameras, and have a small collection of them at my home.

If you could change one thing about your phone what would it be? I live in a bit of a wireless black hole. While that situation has improved over the years as new towers have been added, it's still annoying. I'd want a vastly improved internal antenna.

What does being connected mean to you? Apart from the constant distractions, it means I'm never lost, never off work. It's a double-edged sword.

When are you least likely to reply to an email? First thing in the morning, when I'm going through the news. On the flip side, I'm most likely to reply to email in the evening from the comfort of a couch.

When did you last disconnect? I can't remember the last time I did so intentionally, to be honest. As a small business owner you have to be in touch with the operation. But with that said, I spent a month in Ireland a few summers back that had me offline the vast majority of the time. 

Q&A : Michael Oryl

SIRI EASTER EGGS



The Last Word - Box Brown

engadget

The real-time source and final word for news on gadgets and technology.

download engadget for iPad



1 HOUR AGO
IRL: Sony NEX-C3, Garmin Forerunner 110 and the Elgato Turbo.264 HD

3 HOURS AGO
iPhone 5 to have 21Mbps HSPA+ data? China Unicom says so



30 MINS AGO

Dell confirms XPS 14z will go on sale in the US in the 'coming weeks'

Remember that XPS 14z Dell teased at IFA? Yeah, well, it's arriving soon. As in, "the coming weeks" soon. The company just confirmed it's on the cusp of shipping here in the states, and while the outfit stopped short of giving a starting price, it's good and ready to talk specs. As we reported last month, it has the same industri...

By Dana Wollman September 29, 2011 12:35PM



54 MINS AGO

iPhone 5 cases and realistic unibody dummy show off incredible slimness

While we're only five days away from finding out the true appearance of the next-generation iPhone, our good friends over at BENM.AT went ahead and crafted their very own unibody dummy using CAD drawings, CNC tools and a block of aluminum -- seriously, that's how they roll! Granted, this work's only based on...

By Richard Lai September 29, 2011 12:13PM



1 HOUR AGO

Kobo's Vox Android tablet appears online briefly, gets Canadian release date and pricing

A day after another little-known e-reader manufacturer announced a tablet, a new Android slate from Kobo made a brief online appearance on Future Shop's site, only to be quickly taken down. According to the Canadian retailer, the FCC-approved tablet will offer up a 7-inch display with a 1024 x 600 resolution, WiF...

By Brian Heater September 29, 2011 11:53AM



Iceland gets a data center to call its own, still believes in fairies

You say Iceland, we immediately think Eyjafjallajökull -- and no, we haven't had a narcoleptic collapse upon these very keys. It's been over a year since that volcano swept the headlines and interrupted air travel, providing outsiders with a skewed

NOW PLAYING:
Engadget Podcast 246 - 07.01.2011



Engadget Podcast
09.27.2011

Engadget Podcast
09.23.2011

257

Engadget Podcast
09.20.2011

Engad
09.16.2



Home

Photos

Videos

Saved

Topics

Archives

Settings

Podcasts



Editor-in-chief, Engadget	Tim Stevens
Executive Editor, Distro	Christopher Trout
Executive Assistants, Distro	Billy Steele / Jon Turi
Managing Editor	Darren Murph
Senior Associate Editors	Don Melanson / Brian Heater / Zach Honig Richard Lai / Michael Gorman / Amar Toor Sharif Sakr
Associate Editors	Joe Pollicino / Sean Buckley / Joseph Volpe Terrence O'Brien
Senior Mobile Editor	Myriam Joire
Associate Mobile Editor	Brad Molen
Contributing Mobile Editors	Sean Cooper / Zachary Lutz
Senior HD Editor	Richard Lawler
Contributing HD Editor	Ben Drawbaugh
Reviews Editor	Dana Wollman
Contributing Editors	Kevin Wong / Mat Smith / James Trew Daniel Cooper / Lydia Leavitt / Dante Cesa Edgar Alvarez
Senior Chinese Editor	Andy Yang
Senior Columnist	Ross Rubin
Illustrators	Box Brown / Dustin Harbin / Shannon Wheeler
Editorial Director	Joshua Fruhlinger

App Platform / Creative

Creative Leads
Designers
Contributing Designers

AOL Mobile

Jeremy LaCroix / David Robinson
Will Lipman / Portia Monberg / Aaron Martin
Josh Klenert / Candy Mayo
Davy Reynolds / Brendan Dalton

Product Manager
Architects

Luan Tran
Scott Tury / Todd Brannam

Developers

Kyle Lu / Scott Tury / Mike Levine
Ron Anderson / Terence Worley
Chaitanya Muppa / Tejas Lagvankar
Sudheer Agrawal / Jared Sheehan

Tech Leadership
QA

Bob Ward / Larry Aasen
Harry Bowen Jr. / Moncef Belyamani
Basil Darwaza / Eileen Miller
James Baxter / Scott Basham

Sales

Mandar Shinde / Alice Hawari